An Examination of the Means of Establishing the Efficacy of Asset Recovery and Anti-Money Laundering Policies

Submitted by Matthew Hitchcock FLEMING
(UCL)

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ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

I, Matthew Hitchcock FLEMING, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

Asset recovery (AR) refers to the process through which criminals are deprived of the proceeds of crime. Despite strong support for AR in the policy arena, virtually no work to date has confirmed that it reduces (or should theoretically reduce) crime. This thesis seeks to fill this gap in understanding.

The thesis begins with an examination of the theoretical support for AR, drawing on the economics of criminal behaviour. This chapter probes the claims made throughout the literature, illustrating how different approaches to AR should have different impacts on crime.

AR powers are likely ineffective in reducing crime if offenders' spending/saving behaviour renders them with little to recover. This next chapter examines offenders' spending/saving using data from the UK's Joint Assets Recovery Database.

Offenders can and will take steps to hide the fruits of their labours, and AR will be toothless if offenders can do so. Most AR regimes include anti-money laundering (AML) components to prevent offenders from hiding their proceeds. The crime-reduction efficacy of AML policies is a function of the ability of offenders to reduce their exposure to AR; of banks/etc. to alert law enforcement when they know/suspect that an offender is laundering; and of law enforcement to make use of the information provided. The latter two issues are considered in turn.

Banks/etc. must alert law enforcement (by filing suspicious activity reports, or SARs) if they know/suspect that an offender is laundering proceeds. While this requirement likely deters some criminality, reporting does not deter *all* offenders. This chapter explores whether banks/etc. targeting of laundering represents more signal than noise.

Finally, as the criminality of the undeterred who have been identified by banks/etc. will only be reduced if law enforcement uses the SARs sent to them, the final chapter explores the law enforcement's actual use and management of SARs.

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Acronyms

ACPO	Association of Chief Police Officers of England, Wales, and N. Ireland
ACPOS	Association of Chief Police Officers of Scotland
AML	Anti-Money Laundering
ARA	Assets Recovery Agency
AUSTRAC	Australian Transaction Reports and Analysis Centre
CFT	Combating the Financing of Terrorism
CICFA	Concerted Interagency Criminal Finances Action Group
DWP	Department of Work and Pensions
Elmer	The NCIS SARs database
FATF	Financial Action Task Force
FI	Financial Investigator
FIB	Force Intelligence Bureau
FID	Financial Intelligence Division of NCIS (now known as SFI)
FIDU	Financial Intelligence Development Unit
FinCEN	Financial Crimes Enforcement Network (USA)
FINTRAC	Financial Transactions and Reports Analysis Centre of Canada
FIU	Financial Investigation Unit
FIWG	Financial Investigator Working Group
FSA	Financial Services Authority
FTR	Financial Transaction Report
HMCE	Her Majesty's Customs and Excise
HMIC	Her Majesty's Inspectorate of Constabulary
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
IMF	International Monetary Fund
IR	Inland Revenue
JARD	Joint Asset Recovery Database
JDI	Jill Dando Institute of Crime Science, University College London
JMLSG	Joint Money Laundering Steering Group
LEA	Law Enforcement Agency
MLAC	Money Laundering Advisory Committee
MLRTF	Money Laundering Reporting Task Force
MPS	Metropolitan Police Service
NCIS	National Criminal Intelligence Service
NCS	National Crime Squad
NIM	National Intelligence Model
NTFIU	National Terrorist Financial Investigation Unit (Special Branch)
PITO	Police Information Technology Organisation
PIU	Performance and Innovation Unit, Cabinet Office
PNC	Police National Computer
POCA	Proceeds of Crime Act 2002
PSNI	Police Service of Northern Ireland
RART	Regional Asset Recovery Team
SAR	Suspicious Activity Report
SDEA	Scottish Drug Enforcement Agency
SFI	Services-Financial Intelligence (formerly FID, the NCIS SARs-handling unit)
SOCA	Serious Organised Crime Agency
TFT	Terrorist Finance Team (NCIS)

Chapter 1. Introduction

Asset recovery refers to the process through which criminals are deprived of the proceeds/profits and/or instrumentalities of crime. Asset recovery provisions—which commonly include criminal and/or civil confiscation, seizure and forfeiture, and in some cases taxation of criminal earnings—are employed in the legislation of jurisdictions worldwide, to varying degrees and for varying reasons, chiefly to fight profit-driven crime and terrorism.[1] Asset recovery has become increasingly popular in the international arena: countries are encouraged by the Financial Action Task Force (FATF), for example, to introduce confiscation legislation to counter money laundering, and recent attention has focused on confiscation as a means to counter the financing of terrorism. Further, asset recovery enjoys high regard as an important component of any domestic crime-control policy package. Along these lines, this research is motivated by developments in the United Kingdom, where a considerable expansion of the asset recovery powers available to the criminal justice system has been brought about with the introduction of the Proceeds of Crime Act 2002 (POCA), a product of the Government's Asset Recovery Strategy.

What explains the use of asset recovery? A Cabinet Office report commissioned by Prime Minister Tony Blair—a document considered to be a driving force behind the introduction of POCA and the concomitant expansion of asset recovery powers—sums up the issues. It states that asset recovery can, among other things: deter people from crime by reducing the returns that can be anticipated; disrupt criminal networks and markets with an impact on volume crime (by removing the seed capital for future criminality); improve crime detection rates generally by providing a deeper understanding of criminal markets; and potentially generate significant revenue flows (PIU, 2000). Of course, asset recovery also serves larger political ends: being in favour of depriving criminals of their criminal proceeds plays to a tough-on-crime image, regardless of asset recovery's efficacy.

But while the efficacy of asset recovery as tool in the fight against crime seems reasonable prima facie, no empirical research has yet confirmed the validity of

[1] While the concepts remain the same, many jurisdictions employ different labels for confiscation, forfeiture, and the like. This research employs the general catch-phrase *asset recovery* to refer to all powers held by the state to deprive offenders of criminal proceeds/profits/instrumentalities.

these assertions, particularly that asset recovery reduces crime. Some authors implicitly or explicitly question the efficacy of asset recovery, and/or suggest that its use may have unintended consequences, such as: rather than cease criminal activity, offenders who have had their assets confiscated might feel compelled to re-offend (or to do so at a greater rate than normal) to provide for their basic needs or to maintain a certain standard of living; and/or offenders may simply take avoidance measures—money laundering measures—to hide their assets better, rendering asset recovery powerless to reduce crime. Further, strands of the literature suggest that asset recovery may present a challenge to traditional judicial standards of privacy, fairness, and human rights.

So the question remains, motivating this research: is asset recovery (and, indeed, supportive anti-money laundering policy) an effective public policy? That is, does asset recovery reduce crime? Moreover, asset recovery is a broad concept comprised of numerous specific powers, including the ability of the state to recover assets used in crime, or purchased directly with criminal earnings, or representing a value equivalent to the proceeds/profits of crime. More specifically, then, should different approaches to asset recovery have differing impacts on crime? What are the assumptions that underlie the efficacy of the approach—and are these reasonable? What are the weak spots? This thesis explores these issues as a step on the long road of analysis—primarily by establishing a means of examining the efficacy of asset recovery, as opposed to testing asset recovery's efficacy itself. This last point is critical: following Levi and Maguire (2004), it seems unreasonable to assume that there exists a single, straightforward approach to empirically evaluating asset recovery's impact on crime (at least at present, with crippling limitations in data availability presenting one of many considerable hurdles). This implies that there is a long road of discovery ahead, of which this thesis is a part.

The thesis seeks to contribute to the current state of knowledge—by 1) drawing on the body of literature grounded in the work of Becker (1968) on the economics of crime and criminal behaviour (which has been advanced and expanded upon in the decades since, notably in the field of law-and-economics); and 2) exploring the weaknesses of the policy approach when viewed in this light. The

thesis, as a public policy thesis, reflects the multi-disciplinarity of the field of public policy, and itself employs multiple social science methods and sources of data.

This thesis is structured as follows: after this introduction, a background chapter describes asset recovery in greater detail; the relevant literature is summarised; and the theoretical foundations of asset recovery (from the standpoint of the economics of criminal behaviour) are presented. The theory chapter serves to explore the underlying mechanism(s) through which asset recovery should work.

From this, three policy weaknesses are explored. The first such exploration examines the fact that offenders may be judgment proof. That is, they may spend the proceeds of criminality, and in so doing may leave little or nothing for recovery, with clear implications for the ability of asset recovery to deter/disrupt crime. Of course, offenders may simply hide the proceeds of crime. While financial investigators seek to discover all proceeds/assets, hidden or not, they may not always be successful. So the efficacy of asset recovery as a crime-reduction policy will be undermined by offenders' ability to truly squirrel assets from view—i.e. to launder their proceeds. Countries like the UK have active anti-money laundering policy-packages, the main plank of which relates to suspicious activity reports (SARs) regimes. The crime-reduction success of a SARs regime is a function of three things: 1) offenders' ability to creatively hide assets from view (or at least to make otherwise suspicious activity seem legitimate); 2) the reporting sector's ability to spot suspicion when confronted with it; and 3) LEAs' ability to make efficient/effective use of the SARs provided by the reporting sector. This thesis explores the latter two subjects, namely SARs targeting and LEA use of SARs, as two distinct chapters. Lastly, a conclusion chapter summarizes the overall analysis and discusses its implications.

Most of the material in this thesis has appeared in one form or another prior to inclusion here, and has benefited greatly from the comments of reviewers and research consumers. The chapter on the economics of asset recovery was presented at the Midterm Meeting of the European Law and Economics Association in Ghent, Belgium, in January 2005. The chapter on law enforcement agencies' use of SARs was produced for ACPO and the Home Office in mid-late 2005 (and has been summarised in numerous presentations since). And the chapters on the judgment

proof problem and SARs targeting were both produced for the Home Office in early 2006.

Finally, note that the UK's criminal justice system (particularly law enforcement components discussed in the chapters which follow) has changed. Her Majesty's Customs and Excise and the Inland Revenue were folded into one agency, Her Majesty's Revenue and Customs, in April 2005. Similarly, the National Crime Squad, the National Criminal Intelligence Service, parts of Her Majesty's Customs and Excise, and various other smaller agencies were folded into the Serious Organised Crime Agency in April 2006. The thesis employs the agency names used when each chapter was written (so historical names are used).

Chapter 2. Background

2.1. Overview

Asset recovery is identified variously as criminal and/or civil confiscation, asset and/or cash seizure and forfeiture, taxation of criminal proceeds, the removal of illegal gain, and/or the recovery of the proceeds of crime. There are no agreed-upon definitions employed in the international literature (or the broader policy arena); this research employs the catch-phrase *asset recovery* to represent the process through which criminals are deprived of criminal proceeds/profits and/or the instrumentalities of crime.[2] Asset recovery powers are employed for many reasons, including: as part of an anti-drug strategy, generally in the fight against crime, to counter money laundering, or to counter the financing of terrorism. From a crime-fighting perspective, however, asset recovery is generally regarded as a tool in the fight against profit-driven crime, including acquisitive and organized crime. Asset recovery is in its youth: though its origins can be traced to medieval times, asset recovery regimes have only existed in most countries since the 1970s (since 1986 in the UK).

In practice—and in the most general terms—asset recovery is a multi-prong, multi-stage process of some complexity, involving numerous entities, including the police (broadly defined to include the Police Service, Customs, and other investigative bodies), prosecution service, courts, and possibly receivers. Most asset recovery legal proceedings are based on police financial investigations, which trace the assets and liabilities/income and expenditure of offenders. Financial investigations require the cooperation and input, usually compelled through various legal orders, of the financial sector, law firms, accounting firms, tax authorities, benefits/social security offices, and the like. These organizations may be based within the local jurisdiction of the investigative body, in-country, or even overseas, and may include law enforcement authorities of foreign jurisdictions. The findings of the financial investigation are relayed to the prosecuting authority, who may or may not take the case forward. If the case is taken forward, a judge then determines the merits of the case (usually on a civil standard of proof) and serves some form of asset-

[2] An important distinction is drawn between the recovery of gross proceeds and net profits, discussed in greater detail below.

recovery-specific punishment (asset recovery proceedings are often distinct from the sentencing phase of a criminal case). Finally, an enforcement authority may then become involved to ensure offender compliance with the court's determination. The success or failure of most asset recovery cases rests in large part on the ability of an offender to hide the existence and location of assets (i.e., the proceeds/profits of crime and realizable assets), of the police authority to uncover such assets, and of all relevant bodies and cooperating organizations (including the prosecution and the courts, and even criminal justice entities in foreign countries) to be familiar with the law, to cooperate, and to act expeditiously (Levi (2003) comes to a similar conclusion). Cases can take anywhere between several months to several years.

Importantly, the authorities can only recover what is realisable, and, therefore, a criminal who has benefited considerably from crime, but who has no realisable assets—that is, someone who has saved neither illegitimate nor legitimate income, perhaps spending everything on a live-fast lifestyle—will generally not be subject to asset recovery penalties (in this sense, then, asset recovery is like a fine whose size is conditional on the proceeds of criminality, but also conditional on wealth). This has broad implications for the efficacy of asset recovery.

By way of example: a drug trafficker is arrested by the police and ultimately convicted, receiving a term of imprisonment of several years. In separate proceedings, the authorities (i.e., police, prosecution, court) determine that the offender earned a certain amount of money from his criminality; the offender is then billed for this criminality. The bill is what is commonly known in the UK as a *confiscation order*. Prior to the introduction of confiscation, the offender might have been free to enjoy the fruits of his labours upon release from prison.

2.2. Asset Recovery Powers and Provisions: A Taxonomy

In the example above, confiscation represents an asset recovery power. But asset recovery is a multi-faceted policy instrument, and confiscation is only one of many powers within the broader tool-box of an asset recovery regime. Approaches to asset recovery include the following: recovering assets which have been used to commit a crime (e.g., speedboats, cars), commonly known as the instrumentalities of crime; recovering assets purchased directly with the proceeds of crime; recovering a value equivalent to the proceeds of crime; and taxing the proceeds of crime (in the

likely event that offenders have not paid tax on criminal earnings). These asset recovery powers and various important provisions are discussed in turn below.[3]

2.2.1. Powers

Recovery of instrumentalities

Jurisdictions may recover the instrumentalities of crime. These are the tools of crime, though they may be assets which if used in other ways would not themselves be criminal. That is, the authorities may recover items which are illegal in their own right, like certain types of firearms or drugs, and/or they may recover the boat used to smuggle the drugs or the house/car in which they were concealed. The boat, house, and car only represent instrumentalities if used for illegal purposes.[4] Cash may also be an instrument of crime, and cash seizure powers in many jurisdictions allow cash suspected of being the proceeds of crime or intended for use in crime to be seized by the authorities on-the-spot. The recovery of instrumentalities is primarily regarded as an *in rem* power (in which the action of the state is directed against the *thing*—cash, house, boat—not the individual). A cash seizure, then, says nothing about the guilt or innocence of the individual in possession of the cash.

Recovery of direct purchases

Many jurisdictions allow the authorities to recover assets purchased directly with criminal proceeds. An example of this might be the recovery of a car purchased directly with money earned through the sale of cocaine (whereby the house, if purchased directly with legitimate earnings, may remain in criminal hands). One difficulty with direct purchase recovery is the forensic accounting headache associated with determining the items purchased directly with criminal funds. There may, of course, be overlap between instrumentalities and direct purchases: the speedboat used to smuggle cocaine may have been purchased directly with the

[3] Importantly, the intent of the present research—and of this section in particular—is to set the stage for an economic analysis of the different asset recovery provisions, not to provide a thorough treatment of the history or law of asset recovery (historical and legal perspectives are provided by a number of authors; see, for example, Stessens (2000)).

[4] Their recovery is often contentious (e.g., should a house be confiscated simply because someone used prohibited narcotics inside its walls?).

proceeds of previous criminality. Recovery of direct purchases is primarily an *in rem* power.

Recovery of an equivalent value

Jurisdictions also often allow for the recovery of a value equivalent to the proceeds/profits of crime. Recovery of an equivalent value is in many ways like a fine: guided by the amount estimated by the authorities to be criminal proceeds, a confiscation order (i.e., the "bill" for criminality referred to in the drug trafficker example above) specifies the sum to be paid to the state—but it does not specify which assets (e.g., cash, savings, house, car) should be used to satisfy the order.[5] Kilchling (2001) notes such a system has two principal benefits: "concealment, displacement or destruction of assets is irrelevant; and the grasp to legal property is made possible." Equivalent value recovery is regarded as an *in personam* action, and is directed at the offender.

Taxation

A long-standing—though seldom used—power held by many states is the ability to tax all income, regardless of its source (i.e., irrespective of the legality or illegality of the income-generating activity). Criminal earnings may be taxed, with interest and penalties for non-payment, by tax agencies or criminal justice entities. Taxation is often used as a fail-safe, if other avenues (e.g., recovery of an equivalent value of criminal proceeds) are tried and found to be unsuccessful.

2.2.2. Provisions

Proceeds v. profits

The discussion has highlighted the difference between proceeds/profits (by always using both words when appropriate). This is because states often choose to recover gross criminal proceeds. In this case, the authorities may seek to recover the gross proceeds of a crime or series of crimes, which will *not* be net of costs. Proceeds recovery is a contentious issue in certain jurisdictions. Debate on the appropriateness of proceeds recovery surrounds the question of whether such a penalty should be

[5] A variation of this is sometimes referred to as the *substitution of assets*; see Pianin (1982).

punitive or reparative (i.e., whether the offender should be put in a position which leaves him worse off than he was prior to committing the offence, of if it should simply leave him in the *status quo ante*).

General v. particular criminal conduct

Several jurisdictions allow for the recovery of the proceeds/profits of general aggregate criminal behaviour, not simply the particular offence for which the offender may have been caught and convicted (or perhaps not even convicted, as noted), subject to certain criteria. Criteria usually include being convicted of a certain serious offences, or a number of lesser offences within a specified time frame. If criteria are satisfied, the court finds the offender to have a *criminal lifestyle*. In many ways, this is similar to using a higher penalty for repeat offenders (in the spirit of "three-strikes-and-you're-out" legislation).

Provisions to prevent avoidance

Offenders may choose to spend criminal earnings (or even non-criminal earnings, given the use of equivalent value confiscation) only in the event that the authorities become aware of their activities. Once arrested, or once it otherwise becomes clear that the authorities are closing in (perhaps the offender is given a tip that the authorities are on to him), it may be in the interest of the offender to move assets out of sight or to spend them, before the authorities can recover them. **Restraint** prohibits such asset dissipation: for example, the authorities may place bank accounts or real estate under restraint, and any parties who disobey the restraint (e.g., bank staff, estate agents, solicitors) can be held in contempt of court.

Alternatively, offenders may simply refuse to comply with asset recovery punishments. In this case, most jurisdictions allow for the use of other state-sanctioned forms of punishment. Noncompliant offenders may be remanded in custody for a period of time in what is known as a **default sentence**. But the default sentence is not a term of imprisonment in lieu of payment; rather, the offender faces a **debt overhang**, as a confiscation order is only satisfied when paid in full. If an offender who has not complied with a confiscation order is ever seen by the authorities to be living well—even if he/she has served a default sentence—the authorities may revisit the matter and confiscate up to the originally court-approved

amount. Finally, **receivers** may be appointed to manage the assets of an offender (usually an imprisoned offender); receivers will normally sell off assets to satisfy confiscation orders.

Offenders may seek to simply hide assets out of sight of the authorities. But asset recovery has a broad reach. **Overseas provisions** of asset recovery regimes permit criminal justice systems to confiscate the proceeds of criminal conduct held outside the country in question and prevent offenders from simply parking assets offshore.

Finally, most asset recovery regimes include **anti-money laundering (AML) provisions**. Money laundering is the "process by which the proceeds of crime are converted into assets which appear to have a legitimate origin, so that they can be retained permanently or recycled into further criminal enterprises" (Explanatory Notes to the Proceeds of Crime Act, 2002). If offenders can easily hide the existence and location of assets (through money laundering), then asset recovery legislation is likely to be of limited use in the fight against crime. AML provisions close many of the most important loopholes in asset recovery legislation by prohibiting the concealing, arranging, or acquiring of criminal property. Further, AML provisions take advantage of what is referred to as the *regulated sector* of financial institutions, lawyers, accountants: actors in the regulated sector must disclose all suspected money laundering transactions, or else be themselves liable for prosecution.

Separate proceedings/recovery without conviction

Asset recovery may or may not represent a component of the overall criminal sentence. That is, convicted offenders may find themselves sentenced by the courts for the offence(s) in question (and thus given one or more of a variety of custodial and non-custodial punishments, including imprisonment and fines), and then later be subject to asset recovery proceedings and penalties. This implies that asset recovery is usually an increase in overall sentence severity *as perceived by the offender* (even if asset recovery may technically be separate from the sentencing process). In some states, certain penalties, such as fines, are taken into consideration when the size of a confiscation order is determined. This has the effect of watering down the increase in sentence severity (though is generally done for practical reasons: the offender will

only have so much in the way of wealth to pay fines/confiscation orders, discussed below).

Along these lines, states may permit the application of asset recovery powers even in the event an offender avoids conviction. That is, not only may asset recovery proceedings be distinct from the traditional post-conviction sentencing phase, they may also be used in the event that no prosecution is advanced by the state, or before such action, or in the event that criminal conviction fails.[6] This allows asset recovery powers to be used together in a holistic sense, as a policy package, described briefly below.

2.2.3. Adding it up: the UK asset recovery regime

Given the raft of available options, what does an asset recovery regime look like in practice? Most jurisdictions, not surprisingly, maintain regimes which encompass many or all of the powers and provisions described above. In brief, the regime in the UK is broadly as follows:[7] if the authorities choose to pursue asset recovery actions, they must attempt *criminal confiscation* first. Criminal confiscation is the recovery of an equivalent value of criminal proceeds; depending on the circumstances, this may represent up to six years of proceeds (i.e., if the offender is determined to have a criminal lifestyle). If criminal confiscation should fail (perhaps because the offender escapes criminal conviction, or because the confiscation itself fails at some stage), the authorities may turn to *civil recovery* (the recovery of assets purchased directly with criminal earnings), followed by *taxation* of criminal earnings. Recovery of instrumentalities occurs at any stage, and includes cash seizure (the recovery of cash suspected of being the proceeds of crime or for use in crime). Restraint, receivers, default sentences, debt overhang, and overseas/AML provisions all act to limit the avoidance by offenders of asset recovery sanctions.

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[6] Powers are often prioritised, with the state favouring the use of one particular power unless circumstances require otherwise.

[7] Several sources provide in-depth treatments of asset recovery legislation in the UK; see, for example, Millington and Williams (2003), Mitchell *et al* (2003), Rees and Hall (2003). Note that minor differences in policy exist between England & Wales, Scotland, and Northern Ireland, though such differences are not discussed here.

Chapter 3. Literature Review

3.1. Overview

Much of the literature surrounding asset recovery is in fact part of a larger body of legal and political work on money laundering or the war on drugs. In this regard, various sources simply encourage—or discourage—the use of asset recovery or describe its role in the larger anti-money laundering (AML) and criminal justice (or anti-terrorism) policy mix. Other sources focus on comparative issues surrounding the implementation and use of AML and asset recovery legislation in various countries. Still other sources discuss the ability of asset recovery to generate revenue, in which efficacy is judged by amounts recovered in monetary terms, not reductions in rates of crime. Finally, a small handful of sources explores the relationship of asset recovery to criminal behaviour and its potential to reduce crime. It is this handful which is of greatest interest to the current programme of research, and the discussion below largely focuses on the following documents, with others mentioned as necessary: Bowles et al (2000); Fried (1988); Levi (2003); Levi and Osofsky (1995); Naylor (1999b); and Performance and Innovation Unit of the Cabinet Office, hereinafter PIU (2000).[8] Strongest support for asset recovery amongst these comes from PIU, and strongest criticism comes from Naylor; the remaining relevant authors seem broadly supportive, though aware of asset recovery's limitations as well as its potential.

Numerous other sources only briefly mention but do not further explore the ability of asset recovery to reduce crime. Such sources often focus on asset recovery's role in the AML/drug control/criminal justice policy mix, on cross-country legislative comparisons, or on revenue generation, or may explore asset recovery from a human rights perspective. These sources include documents released by various government departments and agencies and NGOs (see, for example, Home Office (2002b) or Savona *et al* (2001)). They are not discussed in detail here given the limited depth of their contribution to the present analysis. There is also a sizable legal

[8] Three articles by Naylor (2002, 1999a, 1999b) bear strong resemblance to each other; though they differ enough to warrant individual mention on occasion, reference here will be made primarily to Naylor (1999b). Also, Levi (1997) and Levi and Osofsky (1995) are of a similar nature; reference here will be made primarily to the latter.

literature in the United States on the American forfeiture regime (particularly on civil forfeiture), a literature whose focus is not crime reduction, but the legality, proportionality, and desirability of the regime. Further, a small but developing body of work discusses the financing of terrorism, with a focus on foreign policy and/or the extent to which policies to counter terrorist financing should mirror policies to counter money laundering. These bodies of work are similarly not discussed here in great detail (though for more information on the US forfeiture regime, see, for example, Tonry (1997), Jaipaul (1999), and also Worrall (2001); for more information on terrorist financing, see, for example, Greenberg *et al* (2002)). Finally, a large literature describes the economics of crime and criminal behaviour, though not specifically asset recovery. This body of economic work will be employed in the programme of research to explore asset recovery in greater theoretical and empirical detail, but for the purposes of this review will not be discussed.

Implicit in much of the existing literature—be it on money-laundering or the war on drugs generally or asset recovery and crime specifically—is the assumption that asset recovery is an efficacious anti-crime tool; this assumption, however, remains untested: no empirical research has yet been carried out on asset recovery to determine its crime-reduction efficacy. Further, very little work justifies the use of asset recovery from a theoretical perspective, and much of the literature seems to rely not on theory or empirical evidence, but rather on anecdotal evidence or conjecture.

3.2. Support for and Opposition to Asset Recovery

What explains the use of asset recovery? Most sources propose reasons—assertions, given their untested nature—supporting the use of asset recovery, though depth of coverage varies considerably.[9] This is not to say that all of the relevant sources concur with supporting assertions: some authors may mention various reasons for the use of asset recovery simply to later discuss how such reasons may be flawed.

[9] Asset recovery powers manifest themselves differently in different jurisdictions: some countries may allow for the seizure and forfeiture of assets (instrumentalities) used in the commission of a crime (e.g. a speedboat used in drug-running), some may confiscate assets purchased directly with criminal proceeds, and others may confiscate a value equivalent to the proceeds/profits of crime—while some countries may do all (see Stessens (2000) for a discussion). Claims made in the literature generally do not differentiate between approaches (with the exception of Fried (1988) and many of the sources focussing on civil forfeiture in the US). Also, the wording of assertions differs between authors but the concepts broadly remain the same.

In any case, supporting assertions, which are fairly straightforward, fall into categories on crime reduction, revenue, and punishment.[10]

With regard to crime reduction, based on the assumption that much crime is motivated by profit, asset recovery is claimed to deter crime by reducing the expected gains from criminality (Bowles et al, 2000; Fried, 1988; Levi, 2003; Levi and Osofsky, 1995; Naylor, 1999b; PIU, 2000); to disrupt criminal networks and markets with an impact on volume crime by removing the seed capital for future criminality (Fried, 1988; Levi, 2003; Levi and Osofsky, 1995; Naylor, 1999b; PIU, 2000);[11] to improve crime detection rates generally by providing a deeper understanding of criminal markets through increased use of financial investigation (Bowles et al, 2000; Levi and Osofsky, 1995; PIU, 2000); to prevent criminals from corrupting the legitimate economy with ill-gotten gains (the presence of criminal wealth in the legitimate economy is sometimes thought to undermine a country's political and/or financial stability, or to increase risks or insurance costs—see Wechsler (2001) for a discussion; Levi, 2003; Naylor, 1999b; PIU, 2000); and to remove negative role models from communities (PIU, 2000). Bowles et al (2000) add that asset recovery provides a good proxy for the amount of social harm, and that it provides the authorities with an instrument to satisfy marginal deterrence (Fried (1988) concurs with the latter, though not in so many words).[12]

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[10] The assertions supporting the use of asset recovery presented here are made in works discussing criminal activity. FATF (2003b) is the rare exception to the financing of terrorism sources, in that it specifies how asset recovery might have an impact on terrorist activity. It notes the following (similar to claims made regarding the impact of asset recovery on crime):

> Effective freezing regimes also combat terrorism by: (i) deterring non-designated parties who might otherwise be willing to finance terrorist activity; (ii) exposing terrorist financing "money trails" that may generate leads to previously unknown terrorist cells and financiers; (iii) dismantling terrorist financing networks by encouraging designated persons to disassociate themselves from terrorist activity and renounce their affiliation with terrorist groups; (iv) terminating terrorist cash flows by shutting down the pipelines used to move terrorist-related funds or other assets; (v) forcing terrorists to use more costly and higher risk means of financing their activities, which makes them more susceptible to detection and disruption; and (vi) fostering international co-operation and compliance with obligations under S/RES/1267(1999) and S/RES/1373(2001).

[11] Fried discusses disruption in the context of "separating racketeers from legitimate businesses which they have corrupted."

[12] The concept of marginal deterrence implies that more serious criminal activity should be punished more seriously, such that offenders face incentives to choose the least serious crime (see Bowles *et al* (2000) for similar thoughts).

On revenue, asset recovery may also potentially generate significant revenue flows for the state in general or police in particular (Fried, 1988; Levi, 2003; Levi and Osofsky, 1995; Naylor, 1999b; PIU, 2000).[13] Revenue could conceivably have an impact on criminal behaviour if funds were used to supply additional policing or other criminal justice system initiatives.

Finally, asset recovery may serve as punishment in a corrective justice framework, in which asset recovery, as noted by Naylor (1999b), supports the "moral principle that no one should be permitted to profit from commission of a crime" (Alldridge, 2003; Bowles et al, 2000; Fried, 1988; Levi, 2003; Levi and Osofsky, 1995; Naylor, 1999b; PIU, 2000; Stessens, 2000).[14] The principle that no criminal should profit from crime may be sufficiently important to policymakers and the populace to call for the use of asset recovery. So even if asset recovery does not reduce crime, it may still have a role to play as a component part of a comprehensive crime policy package.

In contrast, several authors propose that the use of asset recovery may have unintended consequences, and may cause crime rates to increase or may have no impact on crime. Opposition to asset recovery is not as straightforward as support, and fewer sources make mention of such unintended consequences than of supporting assertions. Opposing assertions fall into categories on crime reduction (i.e., lack thereof), costs, and "collateral damage."

Levi (2003), Levi and Osofsky (1995), and Naylor (1999b) claim that rather than deter criminality, asset recovery might encourage re-offending, or re-offending at a rate higher than normal: offenders who have been served a confiscation order might feel compelled (or more compelled) to re-offend upon release from prison to provide

[13] In fact, this point is made, implicitly or explicitly, in most sources on asset recovery, including the broader bodies of work alluded to in Footnote **Error! Bookmark not defined.**).

[14] Much of the debate in the international legal literature on asset recovery is centred on whether or not powers are punitive or corrective/reparative, discussed in the context of the confiscation of gross proceeds or net profits (see, for example, Alldridge (2003), Fried (1988), and Stessens (2000)). Confiscation of the former is thought to be punitive, while confiscation of the latter puts the offender in the *status quo ante*, the position prior to committing the crime (POCA allows for the confiscation of gross proceeds). The confiscation of proceeds v. profits has substantial implications for deterrence, and will be discussed in upcoming economic work.

for their basic needs or to maintain a certain standard of living. Furthermore, Boudreaux and Pritchard (1996) propose that while asset recovery (US civil forfeiture in their article) might reduce the supply of drugs, in so doing it might increase their price and thus the amount of crime committed by users to pay for their habits. Fried (1988) argues that the deterrent value depends on whether gross proceeds or net profits are confiscated, with the impact of the latter being weaker (see Footnote 14). Fried also suggests that the ability of asset recovery to deter criminality likely depends on the type of criminal targeted (and notes that the threat of prison is probably a stronger deterrent for most offenders, especially white-collar offenders).

Further, Bowles et al (2000), Levi (2003), Levi and Osofsky (1995), NCIS (2003), and PIU (2000) suggest that offenders may engage in avoidance activities (i.e., activities to hide the existence and location of assets from financial investigators), limiting the efficacy of asset recovery. (Of course, not all offenders will have the ability to take such defensive measures (Levi and Osofsky, 1995)). Savona et al (2001) suggest that international cooperation remains sufficiently problematic to hamper asset recovery cases with international dimensions, a fact which appears to have not escaped notice by the criminal element. Hence, if avoidance activities are not overly costly or difficult for the offender to use, and if such activity hampers the success of asset recovery cases, the impact of asset recovery on rates of crime may be limited.

Several sources claim that the ability of asset recovery to disrupt crime may be overstated. Levi (2003), Levi and Osofsky (1995), and Naylor (1999b), propose that criminals may not require much in the way of seed capital to carry out offences, and may be able to secure goods (e.g., drugs) for resale on credit. PIU (2000) acknowledges that the understanding of the extent to which criminal firms resemble legitimate businesses needs further development (implying that the disruptive effect is uncertain). In any case, if capital markets are deep and accessible, and if criminals can operate on credit (or need little operating capital in the first place), asset recovery may do little to disrupt criminal behaviour.[15]

[15] It may be the case that lenders will become more reluctant to lend if loans remain unpaid because a criminal's assets have been confiscated (see Levi and Osofsky (1995) for similar thoughts).

Criminals may choose to spend (i.e., consume), rather than save, rendering asset recovery powers largely ineffectual (the authorities can only recover what is realizable, and past consumption of nondurable goods and services cannot be reclaimed if the offender has no means of satisfying a confiscation order). Several authors claim that in most cases criminals probably have very low savings rates (Levi, 2003; Levi and Osofsky, 1995; Naylor, 1999b). Naylor (1999b) suggests that the use of asset recovery will encourage offenders to modify their savings behaviour (if they save at all) by saving less. Of course, a change in consumption/savings patterns may also imply that there is less money available for use in the criminal marketplace (saving by one allows for investment by others: offenders may save for criminal or non-criminal purposes (e.g., retirement); if a determinant of the supply of criminal financing is how much offenders save, this changing in consumption/saving may itself have a disruptive effect.

Bowles et al (2000) suggest that removing illegal gains reinvested in legitimate activities usually has an opportunity cost which is greater than zero; Naylor (1999b) concurs. In other words, for those criminals who do save, many—or at least some—likely employ legitimate savings vehicles, including those in international capital markets (Naylor (1999b) alludes to the irony that criminals whose portfolio includes US government bonds are actually subsidizing the US government and its activities, including the war on drugs). Pulling capital out of these markets has a cost, in that criminal savings behaviour allows for public and private spending. Naylor (2002) posits that this cost might be highest for developing countries (whose sources of financing are limited). The implication is that both confiscation and changes in consumption/saving behaviour come at a cost to the economy. Of course, the claim that asset recovery can prevent criminals' inefficient spending in the legitimate economy, and the counter-claim that removing illicit savings from the legitimate economy has a non-zero cost, may be overstated if criminals have low savings rates.

PIU (2000) notes that the use of asset recovery may place a financial burden on the criminal justice system through increased police, prosecution, and court costs, particularly in the months and years after the introduction of POCA (though the PIU discusses cost implications not in opposition to the use of asset recovery, but rather as a point of fact, and suggests that asset recovery should generate net increases in

revenue, as do most sources—see page 23). There may, then, be an opportunity cost in the use of asset recovery: the funds could be used elsewhere in the criminal justice system, perhaps to greater effect. Alldridge (2003) makes a similar claim.

Turning to the last of the unintended consequences, several authors mention that the use of asset recovery may cause what Naylor (1999b) refers to as "collateral damage": the very use of asset recovery may 1) present a challenge to traditional judicial standards of privacy, fairness, and human rights; and 2) it may skew policing priorities (through a targeting of offenders driven by the desire to generate revenue, not to reduce crime). Most such criticisms appear in the sizable literature on the American forfeiture regime (see Footnote **Error! Bookmark not defined.**), a regime seen by many as excessive, particularly with regard to its approach to civil forfeiture (see, for example, Tonry (1997) for a catalogue of abuses, and Worrall (2001) for a discussion of the growing dependence of US law enforcement agencies on forfeitures for budgetary support).[16] Note Boudreaux and Pritchard (1996):

> Thus, revenue effects of drug crime enforcement, rather than social welfare consequences, will determine the allocation of police efforts attacking various kinds of criminal behaviours...Allowing law enforcement agencies to retain proceeds from civil forfeitures affords agencies discretion over their budgets. As a consequence, agencies produce either sub- or supra-optimal drug enforcement, leaving society worse off.

Policy-makers in the UK seem to have recognized the need to avoid the pitfalls of the US system, and have tried to incorporate sufficient protections in the legislation to safeguard human rights (PIU, 2000; though see Alldridge (2003) for a critique of the UK system on human rights grounds, and Stessens (2000) for a more multinational critique). Levi (2003) notes that hypothecation is not widely practiced in the UK, preventing the police from the kind of addiction noted by Worrall.[17]

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[16] Acrimonious debate rages between supporters and opponents of the American regime. A primary concern lies with the potential in the US civil forfeiture regime—akin to the forfeiture of the instrumentalities of crime—for disproportionate sentences. The regime was reformed in 2000, limiting the likelihood of abuses.

[17] The introduction of a scheme to "incentivise" the police suggests that this may be changing.

Finally, turning from the discussion of supporting or refuting hypotheses, several authors suggest that the efficacy of asset recovery might simply be limited by failings on the part of the authorities. Levi (2003) summarizes the issues—most of which are mentioned in some fashion by the Home Office (1998), Levi and Osofsky (1995), PIU (2000), and Savona et al (2001)—noting, among other things, that inadequate police training and resources, inadequate coordination and intelligence exchange between relevant parties, and a judicial reluctance to employ and enforce asset recovery powers and penalties may limit the success of asset recovery in practice.

In sum, the literature both encourages and opposes the use of asset recovery, citing various untested assertions in support or to refute (see Table 3.1). No empirical research has yet confirmed the validity of the above assertions, however, and it is unclear which dominate on balance. Moreover, assertions are likely not mutually exclusive: for example, asset recovery may in fact disrupt crime, but it may also simultaneously encourage some criminals to hide their assets better to avoid detection and confiscation. Or asset recovery may deter crime in aggregate, while also encouraging certain individual offenders to commit crime at a higher rate than normal to regain confiscated assets (this scenario is not unlikely, though in this case crime rates may still fall: more crimes may be deterred than encouraged). Finally, failings in the criminal justice arena might undermine efficacy (that is, asset recovery might be a particularly effective crime-reduction policy, but its impact on crime might be hamstrung by various shortcomings on the part of law enforcement, prosecuting authorities, and the courts to make the most of the powers available).

Table 3.1. Assertions Supporting and Opposing the Use of Asset Recovery: A Summary of the Literature

Assertion	
Supporting	Deters crime by reducing the expected gains of criminality
	Disrupts criminal behaviour by removing the seed capital for further criminality
	Improves crime detection rates by providing deeper understanding of criminal markets
	Prevents criminals from corrupting the legitimate economy
	Removes negative role models from communities
	Provides proxy for amount of social harm
	Provides instrument to satisfy marginal deterrence
	Generates revenue flows
	Serves as punishment in a corrective justice framework
Opposing	Encourages crime or no deterrent effect
	Encourages the use of avoidance activities
	Little seed capital required or no impact on criminal access to capital
	Savings behaviour will change or no savings at present anyway
	Pulling out of legitimate economy has a non-zero opportunity cost
	Increased criminal justice system costs
	Skews policing priorities
	Collateral damage challenges standards of privacy, fairness, human rights

Sources: Various, including Bowles et al (2000); Fried (1988); Levi (2003); Levi and Osofsky (1995); Naylor (1999b); and PIU (2000).

But despite its popularity amongst criminal justice policy-making circles, (and this despite the aforementioned criticisms), scant mention is made in the literature of the mechanics of asset recovery, and little to this point has indicated why asset recovery should reduce crime. In other words, not only does asset recovery's impact remain empirically untested, its theoretical support remains largely unexplored. In the event, only PIU (2000) and Bowles et al (2000) discuss why the above assertions—pro or con—might be valid. Both sources draw from the work on the economics of crime and criminal behaviour begun in 1968 by Becker. Bowles et al (2000) provide the most comprehensive treatment of the issue. They note that the use of asset recovery represents an increase in sentence severity, which, in the Becker framework, deters crime. They further suggest that the removal of illegal gain (by which they mean profit) on its own, without further punishment, is suboptimal (otherwise, even if all net profits are confiscated, criminals are in the position they were prior to offending)—though the validity of this claim depends on the proceeds v. profits approach employed, as well as certain assumptions. They also specify circumstances in which it might be better to confiscate only a proportion of the gains, not their entirety (e.g., to minimize socially wasteful avoidance activity). These issues and

more account for a significant component of the larger research programme, and are discussed in the following chapter.

Chapter 4. Theoretical Underpinnings[18]

This chapter examines the theoretical support for asset recovery's use in the fight against crime—seeking to contribute to the current state of knowledge—by drawing on the body of literature grounded in the work of Becker (1968) on the economics of crime and criminal behaviour (which has been advanced and expanded upon in the decades since, notably in the field of law-and-economics), and by building on the asset-recovery-specific work of Bowles *et al* (2000).

The chapter is structured as follows: after this introduction, the theoretical foundations of the economics of criminal behaviour are presented; the implications of the literature and theory are discussed; and a conclusion section summarizes the analysis.

4.1. The Economics of Criminal Behaviour

This chapter employs the parsimonious law-and-economics approach derived from Becker's seminal 1968 work on the economics of crime—alluded to in the work of PIU (2000) and employed by Bowles *et al* (2000)—to explore the theoretical underpinnings for asset recovery.[19] An abundant literature on the economics of crime has been developed since the publication of Becker's work (itself reviving theories of Bentham and Beccaria). Much of the literature has been generated by scholars in the growing field of law-and-economics. Broadly, the objective of the literature has been two-fold: the analysis of criminal behaviour, and the design of optimal law enforcement/punishment. The present chapter is most concerned with the former, which focuses on exploring and explaining individual and aggregate participation in criminal activity (i.e., the supply of offences), while the latter discusses not only behaviour but also optimal crime policy from a social welfare (i.e., efficiency) perspective.

On criminal behaviour and the supply of offences, Becker stipulated that criminals were not irrational, but rather rational, and that as a result, the tried-and-

[18] The author wishes to thank participants at the Midterm Meeting of the European Association of Law and Economics in Ghent, Belgium (February 2005) and two anonymous readers for their comments.

[19] For summaries of the law-and-economics approach, see also Polinsky and Shavell (2000) and Garoupa (1997).

tested microeconomic theory of behaviour under uncertainty could be applied to the analysis of crime. That is, criminals were (are) rational actors whose behaviour could (can) be explained in a utility-maximizing framework.[20] Criminals engage in criminal activity if the benefits of doing so outweigh the costs (though, as Becker notes, this does not require "perfect knowledge or lightening-fast calculation" on the part of offenders). Formally, the expected utility EU of engaging in a criminal activity can be represented as follows:

$$EU = pU(y - f) + (1 - p)U(y) \qquad (1)$$

- where y is income (monetary and psychic) from an offence,
- $U(\cdot)$ is the offender's von Neumann-Morgenstern utility function,
- f is the monetary equivalent of punishment, which may include the opportunity cost of imprisonment captured by lost wages (f is often informally called the "severity of punishment"),
- and p is the (subjective) probability of conviction (often informally called the "certainty of punishment");[21]

a crime is committed if $EU > 0$ (Becker, 1968). From comparative statics, the implication of critical importance is that offenders respond to incentives: increases in the certainty (p) or severity (f) of punishment can prevent (i.e., deter) crime by reducing expected utility (as Becker notes, partial derivatives of the expected utility function with respect to certainty and severity of punishment ($\frac{\partial EU}{\partial p}$ and $\frac{\partial EU}{\partial f}$) are both negative, assuming marginal utility of income is positive). With risk neutral offenders (in the strict economic sense), equation (1) reduces to $Ey = y - pf$ from which it can be seen that a crime will only be committed if $y > pf$; increases in p

[20] See also the seminal Cornish and Clarke (1986) for perspectives on rational choice in criminology.

[21] "Certainty" in this case does not connote sureness.

and/or f may change the direction of the inequality. This concept is often referred to in the literature as the "deterrence hypothesis."[22]

From Becker, and with contributions from various authors, can be developed an expected net returns per offence function (Ey) which represents gross returns (g) less costs of committing the crime less expected punishment costs.[23] Costs of committing the crime themselves may be thought of as the sum of 1) the direct costs of crime production (e.g., costs of instrumentalities/equipment; transport; inputs, like narcotics for resale; wages of criminal staff; interest payments on official or unofficial credit; money laundering expenses); 2) foregone earnings (if an offender is robbing a bank, he cannot simultaneously be sitting behind his desk in the office where he is legitimately employed); and 3) distaste for crime. On expected punishment costs, Polinsky and Shavell (2000) separate the severity of punishment variable into fines and imprisonment (allowing individuals to have differing disutilities of each). The expected net returns from crime function is most easily visualized with the assumption of risk-neutral offenders, and can be thought of as follows:

$$Ey = g - c - w - d - p(n + m) \tag{2}$$

- where g is gross proceeds (i.e., gross income, monetary and psychic) from an offence,
- c is direct costs of crime production,
- w is foregone earnings (wages foregone whilst committing the crime, which assumes that crime and employment are mutually exclusive),
- d is the monetary equivalent of the distaste for crime,

[22] While the focus of the present research is criminal behaviour and the supply of offences, Becker notes that deterrence is often costly. He goes on to discuss optimal policy from a social welfare perspective, in which the exercise is to minimize—by setting p and f—the sum of 1) damages from offences, 2) costs of apprehending and convicting offenders, and 3) the social cost of punishments (Becker, 1968). Increases in the certainty of punishment p require more spending on police or other efficiency gains therein (and may similarly require more prosecution and court resources); increases in the severity of punishment f through imprisonment require incurring imprisonment costs (e.g., housing, food, prison guards); increases in the severity of punishment f via higher fines, however, are viewed as costless (as a transfer). His analysis suggests, among other things, that a high-fine/low-probability approach is optimal.

[23] Ehrlich (1996) discusses such a formulation explicitly, while other authors' references to an expected net return per offence function is implied.

- p is the (subjective) probability of conviction,
- n is fines levied if convicted,
- m is the monetary equivalent of imprisonment (the disutility of imprisonment per unit time multiplied by its length);

a crime is committed if $Ey > 0$ (Becker, 1968; Ehrlich, 1973, 1981, and 1996; Polinsky and Shavell, 2000). Increases in all variables but g reduce expected net returns and thus reduce crime; an increase in g increases Ey and should thus increase crime.

Equations (1) and (2) describe individual decision-making processes. The behaviour of individuals per unit time (e.g., per month, per year) can similarly be thought of as a function of the certainty and severity of punishment and u, a host of variables (like [foregone] income in legal activities and the distaste for crime noted above) that might affect the decision to participate in crime (Becker, 1968). Underlying social norms might be included here (Eide, 1994): "norms may be regarded either as restrictions on the set of feasible actions or factors altering the overall evaluation of various courses of action and their outcomes." The behaviour of individuals per unit time may be further aggregated to explain an overall supply of offences function O as follows:

$$O = O(p, f, u) \tag{3}$$

- where p, f, and u represent average values (of the certainty and severity of punishment and the other relevant variables described above);[24]

and it is assumed that the aggregate function behaves as does the individual choice specification, with increases to p and f reducing crime (Becker, 1968). When viewed in aggregate, it can be seen that a reduction in the overall supply of offences comes about via changes to the behaviour of marginal offenders (Ehrlich, 1996): some crime will exist simply because the benefits of crime exceed the costs, and increases to the

[24] This specification employs the general p, f, and u variables, and could just as easily employ the more specific representations thereof found in equation (2).

certainty and severity of punishment may or may not drive expected net return per offence below zero...but when looking at the behaviour of *all* offenders, it is not hard to imagine that increases in the punishment variables will affect at least *some* decisions to commit crime—those of the marginal offenders—and thus aggregate crime rates will fall.[25] Much of the analysis in the present chapter will explore the manner in which asset recovery provisions may or may not affect the net returns per offence function, and thus the aggregate supply of offences.

Of course, like everything in life, it gets more complicated. Becker provides a framework in which participation in criminal activity is straightforward: do so if the reward outweighs the expected costs (i.e., if the net return per offence is positive). But the model has little to say about the *extent* of participation, once the decision to participate has been made. This is explored only with models of somewhat greater complexity. The issue is very similar to that of hours worked in labour supply decisions: when deciding whether or not to work, a rational actor will not enter the labour market if the net wage is negative—but if it is nonnegative, the extent of labour market participation will depend on the individual's preferences for labour (i.e., consumption) and leisure. For example, increases in income tax rates will lower the net wage—but whether the individual works more or less in response to a lower net wage cannot be determined theoretically.

Along these lines, several authors (see, for example, Ehrlich (1973), Heineke (1978), Schmidt and Witte (1984)) have employed various theoretical rational choice models which allow for choice between labour/leisure/crime. These models (which are seldom found in the specific law-and-economics literature, rather existing in a larger, more technical body of work on the economics of crime) allow for more realistic behavioural choices, but in so doing lose the unambiguous predictive power of the Becker model. The allowance for choices regarding the use of time—with returns to crime and legitimate employment as functions of time—implies the existence of income and substitution effects, as with models of labour supply (Becker

[25] Clearly, some criminals who are not deterred will in fact be caught, convicted, and imprisoned. So increases in the punishment variables may reduce crime not through deterrence but through imprisonment: incarcerated offenders cannot commit crime outside of prison walls (ignoring tales of mafia dons controlling criminal enterprises from prison cells).

allows for the choice only between specialization in crime or no crime: crime and employment are mutually exclusive). An increase in the severity of punishment f makes crime more costly (the substitution effect) and thus the offender devotes less time to criminal activity. At the same time, however, an increase in f makes the offender worse off (the income effect), and thus the offender devotes more time to criminal activity. The net impact of these competing pressures depends on the risk preferences of offenders and cannot be determined theoretically.[26]

This is not to suggest that these models have no predictive power whatsoever. Rather, as noted by Eide (1999):

> If one is willing to stick to the rather common assumption of decreasing absolute risk aversion, and also that psychic effects can be monetized, and that there is just one type of sanctions, the effects are clear: crime is deterred by increases in the probability and in the severity of punishment, and enhanced by increases in exogenous income, and in gains from both legal and illegal activities...For risk-neutral people an increase in the probability or severity of punishment and a decrease in the gains to crime will reduce the supply of crime, whereas changes in exogenous income, and in the remuneration of legal activity have no effect.

So while these models can only provide guidance under certain assumptions, the assumptions themselves may not be outlandish. In fact, while it sounds reasonable to call all criminals risk-loving, this is likely not the case (at least not in economists' strict sense of the term).[27]

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[26] Note that Becker's findings on the deterrent effects of increases to p and f remain valid independent of risk preferences.

[27] Note Schmidt and Witte (1984):

> We sometimes observe criminals engaging in very risky activities, such as armed robberies of gasoline stations or convenience stores, which have expected incomes that appear to be dominated by sure (and legal) alternatives. One explanation is that such individuals are risk lovers, but a more convincing explanation is that they think it is fun to rob gas stations or stores. They are not doing it for the money; or, more precisely, they are not doing it for the variance in their income distribution that it induces.

And see Katz (1988) for more on offenders' attraction to the "rush" of crime.

Further, a large body of empirical work confirms the validity of the deterrence hypothesis, which has been surveyed in technical and non-technical pieces by Heineke (1978), Pyle (1983 and 1995), Schmidt and Witte (1984), Cameron (1988), Eide (1994 and 1999), Freeman (1999), and Witte and Witt (2000). Empirical research broadly suggests that increases in the certainty and severity of punishment deter crime (for some recent examples, see Levitt, 1996; Levitt, 1997a; Levitt, 1998; Marvell and Moody, 1996; Witt and Witte, 2000). But the possibility that increases in the severity of punishment may in certain circumstances, under certain assumptions, cause increases in crime should not be overlooked.

This analysis will largely employ the Becker-based approach (and will assume that offenders are risk neutral unless otherwise noted) because it serves as an appropriate vehicle for clearly illustrating the differences between various asset recovery powers. The greater complexity offered by the models of Ehrlich and others is not required to demonstrate the differences between powers. The analysis will not ignore the implications of the other models, however.

4.2. Discussion

So, should asset recovery represent a successful crime-reduction policy? What should be made of the various crime-reducing/crime-increasing claims made in the literature?[28] And should the different powers/provisions have differing impacts on crime? This section addresses such questions using the parsimonious law-and-economics model of criminal behaviour, but also bearing in mind the implications of models of greater complexity. The section begins with an exploration of the recovery of an equivalent value of criminal profit, which can be considered the general case; it then discusses the implications of specific powers/provisions, and a regime in its entirety. The discussion is kept general, though on the whole can be accurately viewed as marginally UK-centric.

[28] The intent of the present chapter is to explore the theoretical support for the ability of asset recovery to reduce crime. As such, it does not examine several assertions made in the literature on issues including: revenue flows, corrective justice, criminal justice system costs, policing priorities, collateral damage, impact on the legitimate economy.

4.2.1. The general case: recovery of an equivalent value of criminal profit

Profit recovery represents a general, easily understood component of an asset recovery regime. The analysis below explores the ways in which profit recovery can affect expected net returns per offence (and thus rates of crime). The intent is to illustrate whether or not the general case should reduce crime, and how it should do so. Each component of the expected net return function is explored, starting with expected punishment costs, followed by the costs of committing the crime, and closing with gross returns to crime. Many of the thoughts below are relevant to all flavours of asset recovery, not just profit recovery; these broader findings are identified as such.

Expected punishment costs

Severity of punishment

This section builds on the work of Bowles *et al* (2000), who present an analysis of the recovery of criminal profits which they call the *removal of illegal gain*. Bowles *et al* note (as does PIU (2000), in a more general sense) that profit recovery represents an increase in expected punishment costs in the Becker framework. Formally, from Bowles *et al*, while expected punishment costs *without* profit recovery are a function of the certainty and severity of punishment, *with* profit recovery the severity of punishment is increased by the amount y, the gains from crime. Incorporating this into the expected-net-return-per-offence model discussed earlier (equation (2)), the individual choice specification becomes (where gains are defined as $y = g - c - w - d$ and all other variables are as described on page 32, noting that the severity of punishment variable has been disaggregated into its component fines and imprisonment):[29]

$$Ey = y - p(n + m + y) \tag{4}$$

[29] There exists some (limited) disagreement in the economics of criminal behaviour literature on whether or not Becker, in his approach (upon which most subsequent work has been implicitly based), already implicitly assumes that the severity of punishment for an offence (f) includes the proceeds/profits of crime (y; see, for example, Brown and Reynolds, 1973; Pyle, 1983). This analysis assumes that the severity of punishment without asset recovery is distinct from (and does not include) the benefit from crime (such that the use of asset recovery over-and-above the existing punishment *does* indeed represent an increase in sentence severity). Also, asset recovery is often distinct from the sentencing process, and thus should have a separate p—this is discussed below.

Driven by the deterrence hypothesis, then, there is reason to expect that the use of profit recovery powers should deter at least some [profit-driven] crime: *ceteris paribus*, expected punishment costs are higher with the recovery of criminal profit than without. As a result, expected net returns from crime are lower, and may in many cases be driven below zero, thereby deterring crime—as a crime is only committed if the expected net return is positive. As noted, this is not to suggest that all crime will be deterred, but rather that when viewed in aggregate, the expected net return per offence will have been made negative for many crimes, and thus the overall supply of offences will fall.

Critically, however, Bowles *et al* (2000) state that "unless detection is virtually certain the prospect of confiscation of the proceeds [sic] from an offence may reduce, but will certainly not eliminate, its *ex ante* profitability" in the absence of additional penalties. Expected net returns per offence will always be nonnegative in theory if *profit* recovery is the only sanction.[30] There is thus a strong call for profit recovery to be accompanied by other forms of punishment.[31] Of course, in practice it may be *accounting* profit, not *economic* profit, that is recovered. In thinking of the costs facing a firm or individual, economic cost includes opportunity costs (like foregone wages, w), while accounting cost does not; accounting profit is thus larger than economic profit. It further seems unlikely that distaste for crime (d) will be deducted from gross returns as a cost in establishing the amount of criminal profit. In this case, profit recovery on its own might indeed have a deterrent effect: for offenders with nonzero distaste for crime and nonzero foregone earnings, expected net

[30] With profit recovery as the only sanction ($n = 0$, $m = 0$), $Ey = y - py = y(1-p)$; because $0 \leq p \leq 1$, and assuming the crime was profitable prior to sanctions ($y \geq 0$), then $Ey \geq 0$ (i.e., it remains nonnegative even with profit recovery).

[31] In some jurisdictions, fines may be taken into consideration when the size of a confiscation order is determined, implying that if recovery is used, the value of any fine levied drops to zero. The call for additional punishment thus implies that imprisonment alone must play the complementary role in this case. But imprisonment may not be sufficiently deterrent, as the disutility of financial penalties and imprisonment may differ. Levi and Osofsky (1995) discuss anecdotal evidence that some convicted offenders fight a confiscation order harder than they fight a prison sentence. This is not surprising when viewed in the economics-of-criminal-behaviour framework. It may be the case that many offenders have only limited legitimate employment opportunities. For such offenders, the opportunity cost of imprisonment—a function of lost wages due to incarceration—may not be very high (though offenders may still assign a high disutility to being imprisoned due to other distaste factors (like a lack of freedom)).

returns per offence may drop below zero with the use of recovery powers.[32] This may only be true for first-time marginal offenders (it seems unlikely that habitual offenders will have much distaste for crime, and their foregone earnings may not be huge), though it is the marginal offenders who are likely of greatest importance to changes in crime rates. In any case, the lesson of Bowles *et al*, that profit recovery on its own will have a limited impact, should not be forgotten.

Certainty of punishment

But while profit recovery should theoretically reduce crime, to what extent would we expect this to be the case? A determinant of its efficacy—and that of asset recovery in general—clearly is the extent to which expected punishment costs really increase through its use.[33] Perhaps expected punishment costs must meet a certain threshold level to have a noticeable impact on rates of crime: expected net returns may be sufficiently large that only sizable changes in expected punishment costs, or other costs, for that matter, will reduce crime (Ehrlich, 1996).

Expected punishment costs are a function of both the certainty and severity of punishment, so even a large increase in sentence severity may do little to deter crime if the certainty of that increased punishment is particularly low. Of course, expected punishment costs depend in large part on a string of probabilities, not least because the profit/asset recovery process is complex. Equation (4) can perhaps better be seen as follows (noting that from this point forward, y now refers to accounting profit, such that $y = g - c$). Here expected punishment costs are a function of the certainty of traditional punishment *and* the certainty of profit/asset recovery, p_R (the separation of p_R from p allows for the fact that profit/asset recovery may not be used in all criminal cases):

$$Ey = y - d - w - p(n + m + p_R yr) \tag{5}$$

[32] With no further punishment, $n + m = 0$, so $Ey = g - c - w - d - p(g - c)$. If $w > 0$ and/or $d > 0$, expected net returns may fall below zero.

[33] The comments in this section are of relevance to profit recovery specifically and asst recovery powers in general. The words *profit/asset* will be used in conjunction to indicate relevance to the specific and the general.

where

$$p_R = (p_{FI})(p_{Found|FI})(p_{CO|Found})(p_{Compliance|CO})(p_{Fundsremain}) \quad (6)$$

- and p_R represents the probability of a profit/asset recovery case being successful,
- p_{FI} is the probability that a financial investigation is carried out,
- $p_{Found|FI}$ is the conditional probability that profits are identified/located given that a financial investigation is carried out,
- $p_{CO|Found}$ is the conditional probability that a confiscation order is served given that assets are identified,[34]
- $p_{Compliance|CO}$ is the conditional probability that the offender in question will comply with the confiscation order (given that one has been served),
- $p_{Fundsremain}$ is the probability that recoverable assets remain (or the proportion of identified assets which may be recovered by the authorities),
- r is a discount rate (where $r = \frac{1}{(1+i)^t}$),[35]
- the remaining variables are as before;

and so any number of things may lower (or raise) the probability of a profit recovery case being successful. The value of the string of probabilities p_R is unlikely to be equal to one.[36] In particular, if any one of the component probabilities is close to or

[34] The term *confiscation order* is used in the UK to refer to the "bill" that the offender receives for his/her criminality. It is used here out of convenience. In the event, in the UK, the gross proceeds of crime may be recovered (discussed below) through *criminal confiscation* (though *civil recovery*, also discussed below, more closely resembles profit recovery).

[35] This formula provides the present value of the punishment served in year t when multiplied by the nominal cost of the punishment; e.g., a confiscation order of 100000 GBP which an offender estimates won't be served for two years, and which an offender discounts at 10 percent (i.e., $i = 0.1$), will have a present value of nearly 83,000 GBP. This is not to suggest than an offender operates with such precision, but certainly some form of discounting occurs.

[36] Bowles *et al* (2000) discuss the possibility that the state may wish to recover a proportion of criminal profits, not the entirety, for efficiency reasons (e.g., "observation and avoidance are costly"). It seems reasonable to assume that p_R will be well below the efficient level, such that moderate increases to p_R will be unlikely to be wasteful from a net social welfare perspective.

equal to zero, profit recovery will have little impact on crime. The determinants of p_R are discussed in turn.

- The probability that a financial investigation is (will be) carried out, p_{FI}, may be low. It may be the case that the authorities are insufficiently trained and/or staffed to carry out a desired level of financial investigations, or that profit recovery is used infrequently for other reasons (e.g., its use is not embraced by police management).

- The probability that profits are identified and located, $p_{Found|FI}$, is perhaps the most involved of the probabilities contributing to the overall p_R. It depends on a number of factors, including the ability of an offender to employ avoidance activities to hide the existence and location of profits, of the police authority to uncover such profits, and of all relevant bodies and cooperating domestic and foreign organizations to be familiar with the law, to cooperate, and to act expeditiously.

- Even if profits are identified and located, a judge may decide to not serve a confiscation order for various reasons (e.g., lack of evidence, lack of awareness of the recovery powers), or may allow an offender to plea bargain the size of the confiscation order to an amount considerably smaller than was initially recommended by the financial investigators/prosecution. All have an impact on the size of $p_{CO|Found}$.

- Of course, offenders might not comply with (i.e., pay) a confiscation order. Evidence suggests that fines, similar in nature to confiscation orders, are often neither taken seriously by offenders nor enforced by the authorities (Mackie *et al*, 2003; PIU, 2000). As such, $p_{Compliance|CO}$ may be low.

- Of utmost importance is the propensity for offenders to save illicit and legitimate earnings, which determines whether or not funds remain for recovery; the efforts of police, prosecutors, and the courts may be of little use if no recoverable assets exist. Some asset recovery authors claim that the impact of asset recovery may be limited by changes to savings behaviour (or that offenders save little at present

anyway). There are two separate issues: one is descriptive (offenders don't save), one behavioural (offenders will stop saving). In a scenario in which offenders save neither legitimate or illegitimate earnings—spending everything on nondurable goods and services—indeed, profit/asset recovery will be weakened. If $p_{Fundsremain}$ approaches zero (i.e., offenders don't save or stop saving), then the contribution to expected punishment costs made by profit/asset recovery itself approaches zero (with little impact on the expected net returns from crime). Future research to illustrate the spending/savings propensities of offenders is called for. Additionally, offenders may structure criminal business(es) to minimize exposure to profit/asset recovery; behavioural implications must also be examined in future work.

- Finally, when considering whether or not to engage in criminal activity, expected punishment costs represent the net present value of future penalties (e.g., foregone earnings due to imprisonment or asset recovery). Because punishment is delivered in the future, the costs must be discounted at a (subjective) discount rate. From Davis: "...the propensity of an individual to break the law will depend on his attitude toward the future" (Davis, 1988). As suggested by Garoupa (2003), "criminals exhibit hyperbolic discounting"; in other words, they over-discount. The result of such behaviour is a low subjective overall p_R.

What matters to deterrence, of course, is subjective probabilities. Thus far the discussion has revolved around objective values; subjective probabilities are some unspecified function of objective probabilities. Offenders operate through their own subjective perceptions, not through objective clarity. And both the complexity of the profit/asset recovery process and the perceptions of the likelihood of various events might contribute to an underestimation of the true certainty of punishment. Sah (1991) suggests that because no perfect source of information on the certainty of punishment exists, potential offenders may look to the experiences of others in their vicinity for guidance. This might contribute to an underestimation—or even overestimation—of the true certainty of punishment and/or profit/asset recovery.[37]

[37] There may be a potential benefit to a subjective underestimation of the certainty of profit/asset recovery by offenders: offenders will under-spend on avoidance activities. And some offenders will be caught, convicted, and imprisoned (and maybe served confiscation orders), regardless of whether or not their subjective interpretations were right or wrong.

And how things are framed (i.e., the context in which information and decision points are presented, particularly as sure things or not, and as losses or gains) matters considerably, as noted by Kahneman and Tversky (2000).

Lastly, the asset recovery literature suggests that asset recovery can improve crime detection rates by providing deeper understanding of criminal markets, thereby reducing crime. Both anecdotal evidence (conversations with the law enforcement community) and common sense indicate that this may be the case. An increase in the certainty of punishment from improvements in crime detection rates will deter crime: from equation (5), an increase in p, *ceteris paribus*, leads to a decrease in expected net returns per offence ($\frac{\partial Ey}{\partial p} < 0$). If the use of profit/asset recovery improves crime detection rates by providing deeper understanding of criminal markets—simply through the use of financial investigation—asset recovery may reduce crime even if little revenue is raised (Pianin, 1982, citing Myers and Brzostowski, 1981, and Smith and Weiner, 1980). Profit/asset recovery in this context likely operates with a lag (after sufficient increased intelligence filters through the system).

Costs of committing the crime

Expected punishment costs (above) are the primary channel through which expected net returns per offence are affected by profit/asset recovery. The use of profit/asset recovery also has an impact on criminal operating costs, however, and from the deterrence hypothesis, increases in costs reduce crime.[38] While it seems difficult to imagine that all such costs of committing the crime are affected, some stand out or at least merit mention. Further, some of the ways in which profit/asset recovery affects costs are likely to be immediate, while others will operate with a lag. In the present context of *profit* recovery, costs are deductible, though cost increases still have the effect of lowering Ey and thus reducing crime (bearing in mind the potential need for additional punishment).

[38] Increases in the costs of offending reduce crime: $\frac{\partial Ey}{\partial c} < 0$, $\frac{\partial Ey}{\partial d} < 0$, $\frac{\partial Ey}{\partial w} < 0$.

Avoidance activities

The literature on asset recovery notes that its use would likely encourage the use of avoidance activities (e.g., money laundering services/methods), with the implication that this might lower the effectiveness and thus crime-reducing impact of asset recovery. This claim is not out of line: Malik (1990) suggests that criminals will choose the level of avoidance that minimizes expected losses (the expected punishment and outlays on avoidance), and that an increase in the expected punishment increases avoidance outlays; work by Andreoni (1995) suggests that the use of avoidance activities may undermine the deterrent effects of crime-control policies. Avoidance activity may or may not render asset recovery powerless to reduce crime, however. While it is hard to imagine that offenders will not make at least some cursory attempt to hide their assets from view, clearly offenders will have mixed abilities, and many will continue to offend as before (and likely get caught; Levi and Osofsky, 1995). Further, avoidance activities have a cost (e.g., fees/percentages paid for money laundering services; PIU, 2000, alludes to such costs, though with little supporting evidence).[39] Such costs are captured in the present model in direct costs of crime production, c; an increase in the use of avoidance activities will increase the costs required to commit an offence, and lower Ey. On the other hand, avoidance activities may hamper the success of financial investigations and asset recovery cases: avoidance activities lower the probability that assets are found given that a financial investigation takes place (discussed above). This in turn lowers the general probability that assets will be recovered (which "dilutes" deterrence (Bowles *et al* , 2000)). The impact of the use of avoidance activity is thus unclear; crime will be deterred if the change in expected return to crime (Ey) due to an increase in the direct costs of crime production is greater than the change in Ey due to avoidance activities lowering the probability that assets are found (i.e. crime will be deterred if $\frac{\partial Ey}{\partial c} > \frac{\partial Ey}{\partial p_R}$).

[39] Indeed, avoidance activities are socially wasteful; it may be in the interest of society to confiscate part, not the entirety, of the proceeds of crime to limit avoidance activity expenditures (Bowles *et al*, 2000).

Cost of capital

Certain costs of committing a crime (e.g., narcotics for resale) must likely be met before criminal returns are realized. Offenders without sufficient wealth to cover such costs must borrow funds from official (e.g. banks) or unofficial (e.g., criminal financiers) sources of credit.[40] Profit/asset recovery has no affect on the legitimate cost of capital, but it likely does have an impact on unofficial criminal interest rates. Criminal credit sources may require higher repayment to compensate for the higher risk of default posed by the use of profit/asset recovery. This should be felt immediately. But the cost of capital from these unofficial criminal lenders might also increase over time, as the supply of criminal capital dries up through profit/asset recovery action by the state. From the deterrence hypothesis, these cost increases reduce crime, though they are only of relevance to offenders in need of financing who have no access to legitimate credit markets. It is unclear what percentage of profit-driven criminals fall into this category.

Along these lines, the asset recovery literature suggests that asset recovery can disrupt criminal behaviour by removing the operating capital for further criminality. Certainly, the successful use of profit/asset recovery removes some capital (i.e., wealth) from criminals who have been caught.[41] For criminals without access to outside borrowing who are pondering re-offending, the removal of capital may indeed prevent future criminal activity because the post-recovery wealth may be insufficient to cover the costs of criminality. Similar disruptive results may be felt by offenders in need of capital only with access to highly-segmented unofficial credit markets, should capital be recovered from the principal financier(s) of such segmented markets.[42] As with capital costs above, this only applies to a specific subset of offenders, and it is unclear whether or not this represents a typical offender (at the very least, capital

[40] This includes non-monetary credit, like narcotics provided prior to payment on terms of trust.

[41] Though, as noted, this may or may not be equivalent to the entire profits/proceeds of crime, given avoidance activities.

[42] Highly-segmented unofficial credit markets refer to situations in which only one criminal financier (or very few) supplies a small number of borrowers, and these borrowers have no other available sources of funding in the short-run.

requirements likely vary by crime type). Further research is needed to establish the spending/saving behaviour and capital requirements/sources of capital of offenders.

The disruption assertion presented in the literature almost seems to imply that asset recovery can prevent recidivism. Undoubtedly, there will be examples of disruption, at least until offenders shore up replacement capital, and recidivism will be reduced. But recidivism in the economic model of crime represents rational behaviour: "If for an offender preferences are stable and the opportunities available remain the same, the degree of criminal activity will not tend to decrease after a conviction" (Eide, 1999). In other words, if the risks and rewards to crime remain unchanged, an offender who offended in the first place will likely offend again, unless required financing is disrupted. Further, it may be the case that asset recovery reduces capital-intensive crime, but leads to displacement into non-capital-intensive crimes. This may be particularly true for offenders with few options in the legitimate labour market, for whom crime is viewed as the only means of satisfying basic needs. It is not clear whether such displacement is bad—Levi and Osofsky (1995) propose that many offenders "will trade from the bottom again, with the greater conviction risks attached to street-level dealing."

Distaste for crime

The asset recovery literature suggests that asset recovery can reduce crime by removing negative role models from communities. This is consistent with Eide's (1994) norm-guided rational offender, for whom rational decisions to commit crime are additionally influenced by social norms. In the present context, this is captured in an increase in the distaste for crime over time. In other words, the presence of a negative role model likely renders one's distaste for crime rather low, but in the absence of such people, crime may grow to be viewed as distasteful (i.e., social norms about crime change, and thus the removal of a negative role model is associated with an increase in d, and a concomitant decrease in Ey). Implicit in this argument are the assumptions that 1) the offenders who will be targeted under profit/asset recovery are the relevant powerful role models; 2) it is the wealth to be recovered that makes the offender a role model; and 3) that such role models would not/could not be removed by other means. These seem to be optimistic on the face of it, though possible.

Regardless, any impact of removing role models will likely not be felt immediately, but will occur over time (if at all).[43]

Gross returns to crime

Finally, the question remains whether or not profit/asset recovery affects gross returns to crime, g. A thought experiment is useful: can profit/asset recovery affect the sale price of 100 kg of heroin? The answer is likely not, unless profit/asset recovery is stunningly successful, drastically reducing the supply of heroin, for example. If this were to be the case, a new equilibrium quantity and price would emerge (without associated demand reductions, the quantity supplied would be lower, but the price of heroin would be higher). For the purposes of this chapter, profit/asset recovery is assumed to have no effect on gross returns.

Implications of models of greater complexity

But what of the implication of the models of Ehrlich and others, which suggest that increases in the severity of punishment might, through income effects, increase crime? In the event, certain asset recovery authors propose that its use might encourage re-offending, or re-offending at a rate higher than normal. These authors generally makes this claim in reference to offenders who have been subject to some type of profit/asset recovery action. In truth, this may apply to *all* offenders. The analysis has thus far employed the straightforward Becker-based model and has assumed that offenders are risk neutral. While this may be the case, it is also possible that offenders are risk-loving (though Schmidt and Witte (1984) state that "risk-loving behaviour is commonly not assumed to exist"; see also footnote 27). If so, and guided by a model of behaviour like that of Ehrlich, the impact of an increase in the severity of punishment—through the use of profit/asset recovery—is indeterminate. In truth, as noted above, existing empirical research broadly supports the deterrence hypothesis, so the use of profit/asset recovery should likewise reduce crime. But the changes to the severity of punishment through asset recovery might be so large that they represent uncharted territory (profit/asset recoveries can be of the order of millions of pounds, much higher than existing fines).

[43] Alternatively, it would be possible to view the removal of negative role models as having an impact on the subjective certainty of punishment (see page 43).

Summary of the general case

In sum, profit recovery should reduce crime by lowering expected net returns per offence. It does this by increasing expected punishment costs and to some extent criminal operating costs, and by removing operating capital. But profit recovery should have little impact on crime in the absence of other forms of punishment, as noted by Bowles *et al* (2000; this is not the case with *proceeds* recovery and/or *criminal lifestyle* cases, discussed below). Moreover, its impact should depend in large part specifically on the certainty of profit recovery, itself a string of probabilities, and on the capital requirements of and capital availability to offenders (and their spending/saving habits). Lastly, the possibility exists, though it seems unlikely, that profit/asset recovery may increase crime through income effects; there is a need for empirical research to test the crime-reduction hypothesis. Note that many of the findings of this section are applicable not just to profit recovery, but to asset recovery as a general concept, and have been identified as such.

4.2.2. Beyond the general case: different powers/provisions and their associated impacts on crime

Asset recovery regimes are multi-faceted, and different powers/provisions may have different impacts on crime. Most powers/provisions differ from the general case in a very straightforward way, primarily in how they affect the size of expected punishment costs. Unless otherwise noted, issues raised with the general case remain valid. These specific powers/provisions will be discussed in a concise manner, employing the approach used above (note that the order of the discussion differs slightly from that used in the background section).

Proceeds v. profits

Importantly, jurisdictions may choose to recover the equivalent value not just of net profits but of gross proceeds (this is the case in the UK: criminal confiscation is a proceeds recovery power). This manifests itself in the Becker-based model as an increase in the severity of punishment: while severity with *profit* recovery is net of costs (though likely not net of foregone earnings and distaste for crime), severity in proceeds recovery represents the gross proceeds, g, and therefore expected

punishment costs are higher.[44] These higher expected punishment costs are critical, as they imply that proceeds recovery may, in fact, deter criminality on its own without the need for further punishment.[45] If criminal costs (c) are near zero, proceeds and profit recovery are virtually identical in impact; for crimes with high costs, however, the difference can be considerable. This in not to say that the difference can be infinite: the upper bound of costs is equivalent to gross returns to crime, g (that is, a rational actor will not commit a crime if the costs outweigh the benefits even before punishment is factored in).[46] While even with profit recovery there may be incentives to reduce operating costs, it seems reasonable to assume that with proceeds recovery, crimes with high operating-cost-to-proceeds ratios will likely be deterred. We might expect a move away from capital-intensive criminality. Further research on the behavioural changes of offenders to asset recovery incentives is required.

General v. particular criminal conduct

Similarly, the severity of punishment may increase by a far greater amount than even the gross proceeds of a single criminal act, if an offender is convicted and subsequently found by the court to have a criminal lifestyle. In this case, the offender stands to lose what may be thought of as a sum of proceeds (or profits, though the usual approach employs proceeds) from previous criminality—known as *general* criminal conduct—even if that criminality is previously unknown to the authorities. In the decision-making of an as-yet unknown (to the police) lifestyle criminal should be the realization that with each subsequent crime comes the risk of apprehension and conviction and confiscation of the *sum* of criminal proceeds (of up to six years of assets in the UK). Formally:

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[44] So in this case, $Ey = y - d - w - p(n + m + p_R gr)$, remembering that for this analysis, net profits (y) are assumed to refer to accounting profits, such that $y = g - c$.

[45] Interestingly, while Bowles *et al* (2000) do in fact mention many of the various aspects of asset recovery regimes (e.g., proceeds not profits, criminal lifestyle), they choose to analyze only the recovery of an equivalent value of criminal profit, ignoring issues raised here.

[46] This implicitly assumes that gross returns to crime are all monetary as opposed to psychic (i.e., the "rush" from committing a crime). This assumption seems reasonable when thinking about profit-driven crime.

$$Ey_i = y_i - d_i - w_i - p(n_i + m_i + p_R \sum_{i=1}^{n} g_i r_i) \quad (7)$$

- where the subscript indicates values for the i^{th} crime,
- all other variables are as before.

It should be clear that this can represent a sizeable increase in expected punishment costs over and above the case of particular (i.e., one-off) profit recovery or even particular proceeds recovery. This may also be counter to marginal deterrence. Marginal deterrence encourages offenders choosing between committing one of several harmful (to society) acts to choose the least harmful one (Bowles *et al*, 2000; Stigler, 1970; Friedman and Sjostrom, 1993). Bowles *et al* (2000) note that profit recovery helps satisfy marginal deterrence, and the same should be true for proceeds recovery. But with aggregate proceeds/profits recovery, if the offender is convicted of any crime satisfying the criteria for criminal lifestyle, the same punishment will be handed down, at least to spend-as-you-go offenders—similar to a fine equal to wealth—leaving little incentive for choosing the least harmful crime.

Critical to the impact of the recovery of the proceeds of general criminal conduct, however, is what is available for recovery. If the offender has spent all past criminal proceeds on non-recoverable goods and services, then asset recovery will little impact on crime, no matter whether aggregate or one-off proceeds or even profits may be confiscated. This is a common issue throughout asset recovery.

Recovery of direct purchases

Recovery of direct purchases most closely resembles a flavour of profit recovery, and should reduce crime accordingly (from equation (5). But establishing a link between criminal funds and purchases may be considerably more difficult than estimating the proceeds of crime. As such, $p_{Found|FI}$ from equation (6) is lower than with the general equivalent value case, with a resulting lesser impact on crime. Alternatively, $p_{Found|FI}$ appears as with the general case, but at higher cost to society (due to the need for more in-depth--and thus more costly—financial investigations). As with the general case, direct purchase recovery of *particular* criminal conduct is unlikely to deter on its own (unless the distaste for crime and/or foregone earnings are

high), though the recovery of the general criminal conduct of a "lifestyle" criminal may. Civil recovery in the UK employs a slightly flexible direct purchase recovery approach, allowing for the recovery of up to twelve years of assets.[47]

Taxation

Taxation similarly resembles a flavour of profit recovery. In this case, criminal earnings are taxed at their appropriate marginal rate, plus interest and penalties levied for non-payment. These are captured in a proxy variable z, which represents the (average) effective rate of taxation.[48] The tax can be viewed as stochastic, and the proxy z can simply be included with the certainty of profit recovery in equation (5) as follows (with all variables as described above):

$$Ey = y - d - w - p(n + m + p_R yrz) \tag{8}$$

Taxation powers exhibit a lesser deterrent effect than the general case of equivalent value profit recovery if the effective tax rate is less than 100 percent, a greater deterrent effect if the effective tax rate is greater than 100 percent (Naylor (1999) argues implicitly that this may in fact be the case), and an equivalent effect if the effective tax rate equals 100 percent.[49] The effective tax rate depends critically on the size of non-payment penalties and interest. Taxation of particular criminal conduct on its own should not deter criminality without additional punishment—unless the effective tax rate is greater than 100 percent. This is not necessarily the case for the taxation of something akin to general criminal conduct (i.e., the sum of criminal

[47] In the UK, while the *criminal lifestyle* provision is specific to criminal confiscation (recovery of particular or general (aggregate) criminal proceeds), the *concept* of the recovery of a sum of previous criminal earnings remains valid for civil recovery and taxation. Note also that civil recovery in the UK does not require a criminal conviction.

[48] The effective rate of taxation, z, is as follows: $z = \frac{\left(yx + yx(1+i)^t + q\right)}{y}$ where y is criminal profit, as before; x is the marginal tax rate; i is an annual interest rate; t is years of interest to be paid; and q is the penalty for nonpayment. For an aggregate tax recovery, y in this case would be replaced by a sum of y variables.

[49] The analysis here is based on the Becker model. Tabbach (2002) provides an analysis of the taxation of criminal income under various tax schemes, drawing on the Ehrlich-based model mentioned on page 35.

earnings for some period of time), though it still depends on the effective tax rate. Taxation recovery in the UK allows for the recovery of up to twenty years of assets.[50]

Recovery of instrumentalities

The recovery of instrumentalities—often referred to as seizure and/or forfeiture—is the least straightforward of the asset recovery powers. It enters the model separately, with its own probability (p_S) and severity (s), because the recovery of instrumentalities occurs independently of other punishments (shown here with, though independent of, proceeds recovery, with all variables as described above):

$$Ey = y - d - w - p(n + m + p_R gr) - p_S s \tag{9}$$

As with all examples of the model, increases in either p_S or s reduce crime. The certainty variable here, p_S, is almost random, as it may result from a random traffic violation (in which suspected cash is found coincidentally in the car boot) just as easily as a pre-planned drug raid (in which the cash is found on the kitchen table). The severity of punishment in the case of instrumentalities is where things become complicated. It may or may not be related to the offence in any meaningful way (e.g., the authorities in some jurisdictions may seize a house in which drugs were stored for ten minutes, even though the value of the seizure is unrelated to the amount of drugs or seriousness of the crime). In this case, the recovery of instrumentalities can have a dramatic impact on the expected net return per offence even for crimes likely to yield small profits (and the seizure of high-value items like houses not used as instrumentalities in the true sense runs counter to marginal deterrence, at a cost to society). Unlike proceeds/profit, direct purchase, and tax recovery, which all happen after-the-fact, the recovery of instrumentalities may occur before, during, or after the crime. The severity of punishment variable may then need to capture the implications of an incomplete criminal activity.

[50] As with civil recovery (recovery of direct purchases), taxation recovery in the UK may occur in the absence of a conviction,. Also note that the twenty-year time-frame appears to be more of a guideline than a strict limit.

It is easiest to think about the various scenarios in which instrumentalities are recovered one by one. Cash recovery (cash seizure/cash forfeiture) is the least complicated recovery of instrumentalities. As noted, the impact of cash seizure on crime (the crime in question) depends on the timing of the seizure: if it is before the profit-generating crime has taken place—if the cash represents financing to be used for the purchase of narcotics—then the seizure might disrupt crime (and thus perhaps s represents the value of c, operating costs). If the cash represents the proceeds or profits from crime, then the severity variable is of a value equivalent to g or y, respectively. And because the process is independent of criminal proceedings, the suspect may be convicted on a related charge and later subject to a criminal confiscation (proceeds recovery). If the forfeiture is not one of cash but rather of the car used to transport narcotics, then s may take the value of the cost of the car, or the use of the car (which may be a sunk cost, of little concern to the offender). Third party rights are critical here: if the car is borrowed/rented, and the owner is unaware of its use in crime, it may not, depending on the jurisdiction, be subject to forfeiture. Even if the car is forfeited, if borrowed, its loss may not be viewed as a loss to the offender. The issue for criminal deterrence, then, is whether or not, and how, the recovery of instrumentalities represents a loss to the offender. Lastly, contraband may be recovered, though this will likely not occur in the absence of criminal conviction and further punishment. With contraband, both the value of goods are lost (lost to the offender), and the crime is likely left unfinished, with no profits realized. From a behavioural standpoint, recovery of instrumentalities, like all recovery powers, should create incentives for the design of criminal businesses, and will likely have an impact on the ownership of various instrumentalities, and the subcontracting of certain businesses to other separate firms or individuals.

Provisions to prevent avoidance

Restraint, **receivers**, **default sentences**, **debt overhang**, and **overseas** and **AML** provisions all reduce expected net returns per offence (and thus reduce crime), primarily by affecting components of p_R, the probability of a profit/asset recovery case being successful, and by raising criminal operating costs, c. In brief:

- The use of **restraint/receivers** at the outset of financial investigations should bolster the deterrent effect of asset recovery, because its use affects the probability

that funds remain, and the probability that offenders comply with a confiscation order ($p_{Fundsremain}$ and $p_{Compliance|CO}$, respectively, from equation (6)). Similarly, restraint may reduce the extent of hyperbolic discounting, as assets are generally restrained at a much earlier stage than punishment is meted out, bringing the impact of recovery into the present (equivalent to reducing r, the discount rate).

- **Default sentences** increase $p_{Compliance|CO}$. Default sentences should reduce crime even for those offenders with low disutility of imprisonment, for whom a default sentence may be inconsequential: individuals generally cannot themselves offend whilst incarcerated (the incapacitation effect).

- From an *ex ante* perspective, **debt overhang** increases the probability that offenders comply with a confiscation order. Debt overhang is a double-edged sword, however. From an *ex post*, post-confiscation order perspective, debt overhang makes legitimate employment more expensive relative to crime. This is because criminal activity may be more easily hidden from the view of authorities than legitimate employment; debt overhang itself is therefore like a tax on legitimate income alone. The implications of this depend on the assumptions made about offenders, as with the more complex Ehrlich-type models discussed earlier (see page 34); with risk neutral offenders, the taxation of legal income but not illegal income increases crime (Tabbach, 2002).

- Naylor (1999b) argues that the use of asset recovery powers might increase the incidence of money laundering by offenders. This may indeed be the case, but **AML provisions** should counter such an increase. Disclosures of suspicious activity (disclosed from the regulated sector) increase the general certainty of punishment, p.[51] Also, AML/overseas provisions should increase criminal operating costs by making criminal avoidance activities more expensive.

[51] Too many disclosures can swamp the system, however. As Ehrlich and Brower (1987) note, "if the volume of offences increases due to changes in exogenous factors, then the extra load on law enforcement agencies could decrease their effectiveness, and thereby cause a reduction in arrest and conviction risks and related sanctions."

Adding it up

So what does a regime look like in its entirety? In the UK, because recovery of instrumentalities, civil recovery, and taxation may all be used in the absence of a conviction, the expected net returns function facing an offender includes components representing each power, not just one alone. This is captured as follows:

$$Ey_i = y_i - d_i - w_i - [p(n_i + m_i + p_R(\sum_{i=1}^{n} g_i - n_i)r_i) + (1-p)(p_C p_R r_i \sum_{i=1}^{n} y_i) + (1-p)(1-p_C)(p_T p_R z r_i \sum_{i=1}^{n} y_i) + p_S s_i] \quad (10)$$

- where p_C is the probability of a civil recovery being pursued by the state,
- p_T is the probability of a tax recovery being pursued by the state,
- all other variables are as before;

and, as always, a crime is committed if $Ey > 0$. In words, expected net returns per offence equal the net returns less expected punishment costs (criminal confiscation less civil recovery less taxation less instrumentalities). What is important to note is that despite appearances, expected net returns will not always be driven below zero due to several mitigating factors. First, and briefly, cases may be specific to particular, not general criminal conduct, such that aggregate sums will not be pursued. Further, because the legislation in the UK requires that criminal confiscation is attempted before civil recovery, and civil before taxation, the likelihood that civil and taxation powers are used is moderated by $(1-p)$, the likelihood of no conviction. And the state will not take each and every failed conviction forward, so civil and tax recovery have their own certainties which are likely to be less than one. In other words, the marginal increase(s) in expected punishment costs posed by civil and tax recovery may not be as large as at first glance. Of course, even if a case is taken forward, the certainty of a recovery succeeding, p_R, is likely itself to be less than one (not least because of the use of avoidance activity and the probability that funds remain for recovery may be considerably less than one, depending on spending/saving behaviour)—and subjective probabilities matter far more than objective reality.

Summary of specific powers/provisions

Using the general case of the equivalent value of criminal profit as a guide, this section has illustrated (theoretically) that different powers and provisions of asset recovery have different impacts on crime. Bearing in mind the conclusions of the section on the general case, critically important to the deterrent effect of the different asset recovery powers is the manner in which asset recovery affects the severity of punishment. As such, the recovery of proceeds should exhibit a stronger deterrent effect than that of profits, and the impact of the recovery of aggregate proceeds should be greater still. If taxation is used, the deterrent effect is driven in large part by the size of interest and penalties (and high interest/penalties can allow this largely profit-based power to emulate the stronger proceeds recovery approach). The recovery of instrumentalities is somewhat of a wild card: the certainty of the forfeiture of various crime-related items is moderately more random than the certainties of other recovery powers. And its impact on crime depends critically on whether the forfeiture of items represents a tangible loss to the offender . Finally, various provisions (restraint, default sentences, debt overhang, and overseas and AML provisions) increase the likelihood that assets will be recovered and/or increase criminal operating costs, which reduce expected net returns per offence and thus reduce crime.

4.3. Conclusion

This chapter has presented the theoretical basis for the use of asset recovery, drawing on the economics of criminal behaviour literature begun by Becker (1968) and building on the asset-recovery-specific work of Bowles *et al* (2000). It represents an application of economists' deterrence hypothesis, itself an application of the theory of decision-making under uncertainty. The chapter suggests that there is indeed theoretical support for the use of asset recovery in the fight against crime (i.e., to deter crime). It provides backing to the generally unsubstantiated claims made throughout the asset recovery literature. It indicates, *ceteris paribus*, 1) that asset recovery should deter at least some crime; 2) and that different asset recovery powers should have differing impacts on crime, because they affect the expected returns to crime in different ways.

In sum, asset recovery should reduce crime by lowering expected net returns per offence. It does this by increasing expected punishment costs and to some extent

criminal operating costs, and by removing operating capital. But its impact should depend on the capital requirements of and capital availability to offenders, as well as—critically—the certainty of asset recovery (which is affected, among other things, by offenders' ability to simply hide the proceeds of crime through money laundering activity). This ability is explored in two of the chapters that follow (specifically in chapters relating to suspicious activity reports). The impact of asset recovery should also depend on offenders' spending/saving habits, also explored in a subsequent chapter. Finally, the possibility exists, though unlikely, that asset recovery may increase crime through income effects.

With regard to particular powers, the recovery of criminal proceeds should exhibit a stronger deterrent effect than that of profits (which itself should have little impact on crime in the absence of other forms of punishment), and the impact of the recovery of aggregate proceeds should be greater still. The deterrent effect of taxation recovery is driven in large part by the size of interest and penalties (and high interest/penalties can allow this largely profit-based power to emulate the stronger proceeds recovery approach). The recovery of instrumentalities is somewhat of a wild card, and its impact on crime depends largely on whether the forfeiture of items represents a tangible loss to the offender. Finally, various provisions increase the likelihood that assets will be recovered and/or increase criminal operating costs, which reduce expected net returns per offence and thus reduce crime.

Chapter 5. The Judgment Proof Problem (Or "Do Offenders Spend It All—And Implications for Asset Recovery?")[52]

In criminal law, monetary sanctions are generally preferred to non-monetary sanctions. This is because the former represent transfers to the state, while the latter carry often considerable costs (i.e. costs of imprisonment). But monetary sanctions may not alone deter criminality; as Shavell (1985) notes, "the monetary sanction needed to deter will [may] exceed a party's assets." That is, offenders' wealth (i.e. net worth) may be insufficient in comparison to the benefit (i.e. proceeds) generated by a criminal act, such that the threat of monetary sanction may hold little or no deterrent effect.

This problem is captured in the judgment proof concept (though the concept is primarily used in tort law).[53] According to Shavell, writing in a different article (1986), an injurer is judgment proof if he/she is unable to pay fully the losses for which he/she is liable. Asset recovery powers, such as confiscation and cash forfeiture—favourably viewed by law enforcement authorities in a number of jurisdictions as quite efficacious in reducing crime—and other monetary sanctions, such as fines, are likely ineffective in reducing crime if offenders' spending and saving behaviour renders them judgment proof (or somewhere far along a continuum of judgment "proofness"), regardless of the extent to which they have benefited from crime.[54] With little to recover, the ex ante deterrent effect of asset recovery is virtually nil—as is its capacity to raise revenue ex post. Further, the ability of asset recovery to disrupt criminality depends on the capital requirements of and capital

[52] The author wishes to thank the members of the Criminal Money Flows project team of the Financial Services Authority; Tristram Hicks and Charlotte Pilgrim of the London Regional Asset Recovery Team; Tina Mawson, JARD business coordinator; Stephen Prichard of the Home Office; and Stephen Smith of University College London. Giuseppe Mattiacci provided useful comments on the judgment proof problem. The Home Office is gratefully acknowledged for its contribution to research costs.

[53] In criminal law, unlike tort law, monetary sanctions can be backed up with custodial (non-monetary) penalties. So offenders un-deterred by monetary sanctions may not be *completely* judgment proof. But the concept should be clear enough. Of course, offenders—particularly hardened criminals—may exhibit a low disutility of imprisonment; the threat of custodial sanctions may in fact be hollow.

[54] Bowles *et al* (2000) note that asset recovery can, in fact, counter the judgment proof problem, as the proceeds of crime can be used to satisfy financial penalties (so offenders who were judgment proof prior to crime may be served post-crime financial penalties). This is only the case if earnings are saved, not spent.

availability to offenders, related to offenders' judgment proof status and their broader financial behaviour.

So are offenders judgment proof? That is, are they likely to be unresponsive to monetary sanctions? And how do they spend their income? What assets do they hold? Very little is known about offenders' financial behaviour. Levi and Osofsky (1995), for example, suggest that "many of the proceeds of crime are spent before arrest," but do so with no systematic empirical backing. This gap in understanding limits the ability of policy-makers to predict the likely impact of asset recovery (and indeed general financial penalties) on crime. The lack of understanding on offenders' spending and asset holding behaviour also prevents policy-makers from assessing the performance of such financial penalty regimes in recovering criminal assets vis-à-vis some theoretical upper limit on the value of assets available for recovery.

The present chapter seeks to fill this gap in understanding by using data from the UK's Joint Assets Recovery Database (JARD), which has hitherto not been analysed in any depth. The chapter presents a profile of acquisitive offenders, to gain an understanding of their spending/saving habits, as well as their more general personal and criminal characteristics. The chapter is the first to empirically explore the financial behaviour and potential judgment proof status of offenders. The chapter is structured as follows: after this introduction, a background section briefly summarizes the literature on monetary sanctions, the judgment proof problem, and existing studies of offenders; the specifics of the data are discussed, including recognized shortcomings; the findings are presented in sections on judgment proof status and saving behaviour, including the policy implications of the analysis; and the chapter concludes with thoughts for future research.

5.1. Background

In the economic model of crime, an offence is committed if the expected net benefit of offending exceeds expected punishments costs—the latter of which include the monetised net present value of imprisonment and any monetary sanctions.[55] The ability of and preference for monetary sanctions to deter criminality is noted in a

[55] For an overview of the economic model of crime, see, for example, Eide (1999).

number of sources throughout the economics of crime and law-and-economics literature (most dating back to Becker, 1968; Stigler, 1970; and, of course, Bentham and Beccaria). Monetary sanctions are preferred to custodial sanctions (i.e. imprisonment) because the former are transfers to the state, while the latter carry various costs (e.g. maintaining and staffing prisons; foregone output of incarcerated offenders). But monetary sanctions carry their own disadvantages.[56] These are addressed in Shavell's specific treatment of the use of monetary and non-monetary sanctions in deterrence (Shavell, 1985, and also 1987). Here, while Shavell notes the preference for the use of monetary sanctions, he also explicitly recognises that the size of an offender's assets—his/her net worth, or wealth—is critical in determining whether or not an offender will be deterred though monetary sanction. He takes this to its logical conclusion: "In the extreme case, for instance, it is impossible to deter a person with no assets by the threat of monetary sanctions." Further, because offenders will not be arrested/convicted 100 percent of the time (i.e. with probability of one), Shavell notes that the lower the probability of arrest/conviction, the higher needs to be the monetary sanction. This, of course, increases the likelihood that the sanction will be larger than net worth. Finally, Shavell states that the ability of monetary sanctions to deter crime depends on the benefit the offender derives from committing the crime; the greater this benefit (imagine the highly-lucrative crime of VAT fraud), the greater the monetary sanction needs to be to deter the crime—and again it seems likely that the necessary sanction will exceed net worth. Thus, monetary sanctions may not always be feasible (i.e. sufficiently deterrent), and thus non-monetary sanctions have an important role to play.

Shavell is not alone in recognizing the role of wealth in limiting the efficacy of monetary sanctions, of course. Most authors make at least passing reference to the issue when discussing the use of fines in the deterrence framework. Levitt (1997b), for example, suggests that with imperfect information on criminals' wealth, or with the majority of offenders' wealth held in the form of human capital, the state cannot simply impose a fine on offenders, who can claim to have insufficient wealth to pay

[56] And monetary sanctions are not costless, of course. Though rarely mentioned in the literature, at least not in any depth, monetary sanctions carry administration and enforcement costs. These will not necessarily always be insignificant. Further, monetary sanctions based on financial investigations, like asset recovery, will command investigative and other criminal justice system resources.

the fine. Imprisonment is necessary in enforcing the fine ("pay the fine or go to jail").[57]

That a potential offender may be undeterred by monetary sanction is captured neatly in the largely civil law concept of judgment proof. As noted above, an injurer is judgment proof if he/she is unable to pay fully the losses for which he/she is liable (Shavell, 1986).[58] This concept is primarily, though not exclusively, found in tort law. It is typically mentioned in discussions of injury prevention (whereby injury implies injuries both big and small, from car accidents with one injured party to nuclear or other environmental disasters, with injured parties in the hundreds or thousands); the injurer is the tort law analogue of criminal law's offender (defendant). Of course, as noted above (see footnote 53), in the case of tort law, custodial sanctions (like prison) are rarely if ever used to back-up monetary penalties. The judgment proof literature is richer than that which deals exclusively with the wealth-driven limitations of monetary sanctions in criminal law. Judgment proof status is often described in the context of discussions surrounding the pros and cons of strict liability v. negligence and the provision of insurance (see, for example, Shavell, 1986; Mattiacci and de Geest, 2003). The point in the present chapter is not to contribute in any normative sense to the theoretical debate on the judgment proof problem, but rather to borrow the concept from civil law and to subsequently explore in a positive sense whether or not offenders as a group may fall into the judgment proof category (or the extent to which they may)—and the policy implications thereof.

Asset recovery refers to the process through which criminals are deprived of the proceeds/profits and/or instrumentalities of crime. This chapter explores asset recovery through the lens of criminal confiscation. A (criminal) confiscation order represents the primary vehicle through which asset recovery penalties are levied. A confiscation order is served following a financial investigation of an offender's

[57] Levitt also suggests that to overcome the problem of limited offender asset-holding, it might be possible for the state to lay claim to some portion of future earnings (i.e. tax future income based on human capital), similar to the concept of child support which is paid over time. Of course, an offender might be in a position to refuse to work. Further, such an arrangement might drive an offender to specialise in crime, depending on the relative tax rates, as criminal earnings are only taxed if found, while legitimate earnings will be taxed by the state (in the traditional sense and also with the state's claim on future earnings akin to child support; see Tabbach, 2002, for more on taxation and crime).

[58] Shavell's concept differs from one of pure insolvency.

affairs; it is only served on convicted offenders. Asset recovery represents a somewhat non-standard flavour of monetary sanction: asset recovery penalties are not fixed in size and vary for each individual confiscation. In this regard, while the penalty for a certain offence (e.g. parking in a no-parking zone) may be a standard fixed amount for each offending party, the asset recovery sanction for an offender's drug trafficking conviction, for example, will be based on a financial investigation of the offender. Specifically, a confiscation order is served in the amount of the offender's estimated benefit from the crime(s) in question, or his/her net worth, if benefit equals or exceeds wealth. The latter option seems probable for the most profitable crimes. Confiscation orders in the UK are served for the amount of the gross proceeds of crime, not the net profit. That is, offenders cannot deduct criminal business expenses from the value of their confiscation order. Computing the offender's estimated benefit depends in part on the crime(s) for which the offender was convicted. Offenders convicted of certain serious offences, or of a number of lesser offences within a specified time frame, are assumed to have had a criminal lifestyle—and with a criminal lifestyle, the FI may assume that criminal benefit is comprised of up to six years' of proceeds. If the offender is not convicted of any lifestyle offences, then the confiscation seeks to recover the particular proceeds of the specific crime(s) in question.

In thinking about efficacy, and guided by Shavell (and others), it is essential to consider whether or not offenders are likely to be judgment proof with respect to asset recovery (and to monetary sanctions in general). This depends critically, of course, on offenders' spending and saving behaviour. If offenders as a group have a propensity to spend heavily as they go—perhaps on the proverbial wine, women, and song—then it seems unlikely that asset recovery will have much of a bite: truly deterrent asset recovery penalties and other monetary sanctions may be impossible to levy due to limitations in wealth.[59]

[59] Of course, monetary sanctions are complemented in the criminal justice system by imprisonment. And many offenders may be deterred from crime for a variety of reasons, not simply the size of the monetary penalties. Such reasons include distaste for crime, cost of committing the crime. Also, note that the concept of judgment proof relates to the concept of less eligibility (see, for example, Sieh, 1989) and the potential impotence of certain crime-fighting policies (like prison). With the concept of less eligibility, the standard of living in prison should not exceed the standard of living outside of prison—such that offenders are motivated to stay out of prison.

But very little research exists on the financial behaviour of offenders themselves. Levi (2003) sums it up (though for a specific subgroup of offenders): "Currently, we have only a modest idea about how much the proceeds of so-called victimless crimes (drugs trafficking and vice) constitute; how much offenders save from crime; and what they do with their money." What scant work there is includes Shavell (1985), who notes in passing that criminals have little wealth, based on (now dated) summary statistics from the US Department of Justice. Weisburd et al (1991, the final in the series of research outputs of the Yale Studies on White-Collar Crime) present some limited but enlightening financial information on a sample of white-collar offenders (who appear to be far less well-off, to say the least, than the "white-collar" title might suggest in the lore of crime). Other statistical reports (e.g. Lynch et al, 1994) present information on employment before arrest, but with little indication of income from that employment (or income from crime, for that matter), let alone net worth. Various other authors (e.g., Reuter et al, 1990; Levitt and Venkatesh, 2000; Dorn et al, 1992, to name a few) explore drug-related offenders and their earnings, but do so qualitatively and/or focus too exclusively on a specific sub-population of the drug market to be of broad use here. Still other sources (e.g. Lewis and Mhlanga, no date) present descriptions of offenders and certain financial characteristics. They touch on estimated earnings from crime, but net worth and/or specific asset holdings fall outside their scope. In all cases, no studies focus exclusively on offenders' benefit from crime and net worth, in any holistic, systematic sense.[60] This is the motivation for the present chapter.

5.2. Data

The analysis is based on JARD data on confiscation orders made between April 2004-September 2005, inclusive. The JARD dataset contains information on the population of confiscation orders for the UK (4,236 orders in this 18-month sample, of which a subset are used for most analyses), including information on assets

[60] Both the National Criminal Intelligence Service (NCIS) and the Assets Recovery Agency (ARA) have drafted restricted intelligence products profiling offenders' financial behaviour in some fashion. The present chapter draws on a broader and more detailed series of records and should serve to inform the future work of these agencies. Read in conjunction with NCIS/ARA products, the present chapter should also contribute to the larger store of knowledge on offender financial behaviour.

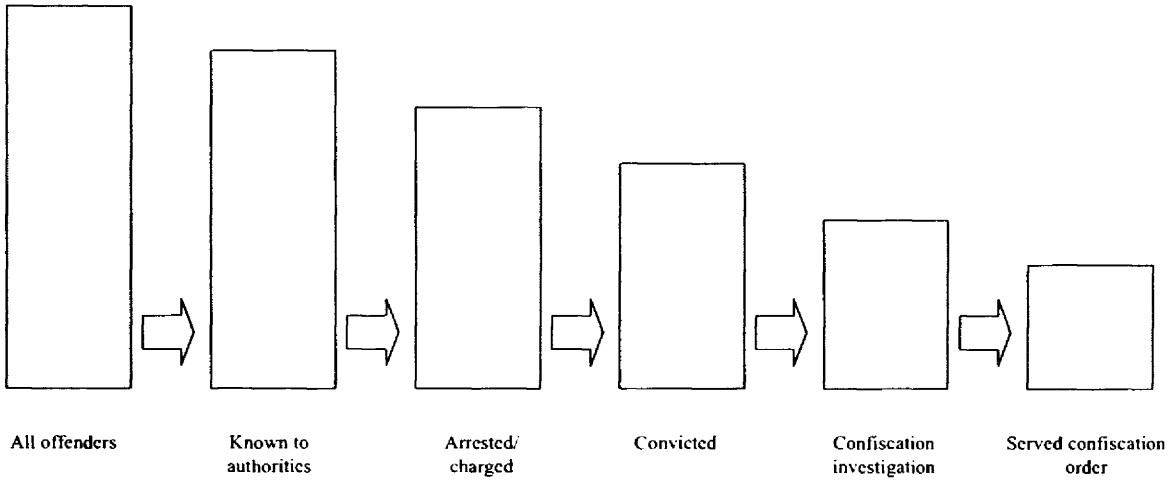
held by offenders. Specifically, JARD includes personal characteristics of offenders; the primary offence for which the offender was convicted; FI-estimated and court-agreed values for criminal benefit and the confiscation order amount; investigating law enforcement agency and date of order; and information on assets held by offenders. JARD is coordinated by staff housed by the Assets Recovery Agency; this dataset was compiled by the JARD coordinator.

JARD data are themselves based on financial investigations of offenders to determine 1) estimated criminal benefit; and 2) available (or "realisable") amounts. Estimated criminal benefit refers to the proceeds of crime for the previous six years (e.g. if the offender has been convicted of any of a number of specific serious offences set forth in the Schedule 2 of the Proceeds of Crime Act 2002; in this case, the offender is assumed to have had a criminal lifestyle and the state will seek to recover the proceeds of his/her general criminal conduct). Estimated benefit may also refer to the proceeds of the specific crime or crimes in question (if the offender has been convicted of lesser offences); in this case, the state will seek to recover the proceeds of his/her particular criminal conduct. Available (sometimes called "realisable") amount refers to an offender's net worth (wealth) at the time of the investigation. This information feeds into the court's determination of what is referred to as the agreed benefit and order amount.

The financial investigations supporting JARD entries will generally have been based on evidence gleaned from an exhaustive set of sources. These may include: information obtained in house/business searches and/or through offender/accomplice/ associate interviews; databases held by the police, other government departments, and the private sector (such as the Police National Computer (PNC) system, force intelligence, Land Registry, Companies House, Voter Registration, Experian/Equifax); and, of course, bank records. Financial investigators (FIs) will typically look for attempts made by the offender to disguise the true ownership and source of assets (perhaps through transfers to and from associates, including family); assets owned by the offender but hidden somehow (e.g. held in the name of another person) will typically be identified in a confiscation order should evidence support the offender's true ownership status.

To contextualise the dataset, offenders in this JARD sample represent only a subset of offenders. A model is as follows: of all offenders, only a subset is known to the authorities, some of whom will be arrested/charged. Of these, a subset will be convicted, and a further, smaller subset will be subject to the confiscation process. Of these, a subset will be served confiscation orders (see Figure 5.1). These final confiscation orders will be recorded on JARD.[61]

Figure 5.1. Attrition in the Process



Note: not to scale.

The data are to some extent suboptimal, of course. Research of this type is susceptible to the criticism that the sample (offenders who were caught) is not necessarily representative of the larger population of interest (all offenders). That this may be the case cannot be ruled out. Moreover, it would be difficult to argue against the presence of sample selection bias: because not all convicted offenders are subject to the confiscation process, it is impossible to ignore the possibility that the data refer only to cases which appeared larger, and/or more outwardly serious, and/or easier to FIs. Put another way, in an environment of constrained police resources, it may be

[61] In truth, confiscation investigations may be launched before an offender is even arrested. But offenders must be convicted before the confiscation hearing can take place, and confiscation orders are only served on convicted offenders. The point of the model is to illustrate attrition. Note also that JARD also houses information on confiscations in-progress (as well as information on cash seizures/forfeitures and civil recoveries); the dataset used for the present chapter includes only completed confiscations (all post-conviction by definition).

the case that confiscations involved few offenders with outwardly little to recover.[62] Further, as asset recovery was employed on a more limited basis prior to the introduction of POCA, the data—largely generated post-POCA—may contain the low-hanging fruit picked in the new POCA environment.[63] And the data can only present information on known assets; those offenders who were particularly good at hiding assets from view may appear to have far less to recover than was the case.

But it seems foolish to dismiss this approach out-of-hand and to ignore its potential contribution. Research specifically on offenders' finances represents previously uncharted territory. It may, in fact, be the case that these sources are perfectly representative of the larger population; we just don't know. Also, many confiscations in the data may have been handled proactively—in the early stages of an investigation, before it may have become apparent that an offender did or did not hold recoverable assets. And the results of a police financial investigation must be sufficiently robust to survive challenges from defence counsel and judicial scrutiny, so it is likely that evidence of benefit and assets will be based on sound investigation not wild speculation. Finally, the data are novel in that offenders therein run the gamut of acquisitive crime types, from duty evasion to drug trafficking.

5.3. Findings

So do acquisitive offenders appear judgment proof with respect to asset recovery? And who are acquisitive offenders? What is their net worth, and how do they hold their assets? This section begins with an analysis of offenders' judgment proof status in subsections on personal-criminal and financial characteristics. The chapter then turns to offender saving behaviour. This latter section seeks to answer the question: what did offenders do with the money (especially if they're judgment proof)?

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[62] Though this is not entirely the case. Some police forces in the UK have taken the policy decision to serve confiscation orders on all offenders, not just those with apparent wealth.

[63] This is not to imply that POCA powers (specifically) have been used in all cases made against offenders in the samples, but simply to note that with POCA came a stronger focus on the use of financial investigation. The asset recovery powers wielded against some of the offenders may derive from the Criminal Justice Act or Drug Trafficking Act, conceptually similar to POCA for the purposes of this analysis, depending on the when the underlying offences actually occurred.

(continued)

In the course of the analysis, facts are interpreted as 1) accurate as reported; and 2) representative of the complete picture (i.e. offenders have not successfully hidden any benefit/assets from view). This is optimistic, and the implications of relaxing the assumption are discussed in a later section. Also, when discussing offender asset-holding behaviour, if any assets have been specifically recorded, values for unmentioned asset types are assumed to be zero. That is, if an FI has noted that offender X holds 100,000 GBP in property and 10,000 GBP in vehicles—but mentions no other specific assets—it is assumed the values for other asset types, such as cash, financial assets, jewellery, etc., are zero.

5.3.1. Offenders' Judgment Proof Status

This section aims to describe offenders in the JARD dataset and to explore their benefit from crime; their net worth upon arrest/conviction/confiscation; and the extent to which their net worth approaches their criminal benefit—or represents some (perhaps much smaller) proportion thereof.

As noted above, the JARD dataset contains information on 4,236 confiscation orders (i.e. 4,236 records); it appears that no offender appears more than once.[64] But not all records are used (largely due to missing data issues), and more records are used for certain analyses than others. Along these lines, because no "available amount" figure is entered onto the database (even though FIs will determine this in their financial investigations), there is no strict equivalent for net worth.[65] A broad proxy variable is as follows: for all confiscation orders in which the court-determined agreed benefit exceeds or equals the court-determined order amount variable, the value of the order amount variable is assumed to represent net worth. Anecdotal evidence from the financial investigative community and from viewing prosecutor's statements

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[64] Some 4,528 records were originally provided by JARD administrators, 292 of which were dismissed for almost complete lack of information. Anecdotal information provided by various FIs suggests that these were likely errors entered by FIs that had not yet been deleted from the system.

[65] JARD's asset-specific information could perhaps be used to compute available amounts, but there aren't enough records with full asset-specific data to allow for certain analyses of interest (e.g. exploring differences in net worth by primary offence). FIs appear to have been given little guidance on how to complete JARD's optional open-ended text descriptor fields for specific assets. Moreover—and this is the worrying factor—the quality of data on assets varies wildly; much of the data is not usable.

(submitted in the confiscation process) suggests that order amount is sufficiently synonymous with available amount. To keep the analyses consistent, the sample has been restricted to the records for which this is the case: of the records with sufficient data to generate this agreed-benefit-to-order-amount ratio—some 3,687 records—only seven failed to meet the criterion of agreed benefit exceeds or equals order amount.[66] This implies that the majority of the discussion below employs a subset, rather than the total, of the overall 4,236 records; this subset contains 3,680 records (see Table 5.1). Note that the court-determined agreed benefit and order amount variables have been used here instead of the FI-determined estimated benefit and order application variables (these also exist in JARD). This is the case because often FIs will not apportion amounts to individual offenders in cases in which more than one offender is part of the criminality in question. So the FI-determined estimated benefit amounts will often refer to the gross proceeds of a group of offenders, not individual offenders, and may include double-counting; the presiding judge will generally be responsible for apportioning the benefit between offenders in groups. Only the court-determined amounts have been used in the analyses below; comparisons between the FI-determined amounts and those determined by the court are presented in an appendix.

Table 5.1. Number of JARD Confiscation Order Records Used

	FY2004/05	*FY2005/06 (Apr.-Sep.)*	*Total*
Overall confiscation orders	N=1,774	N=2,462	N=4,236
With non-missing entries for order amount	N=1,774	N=2,462	N=4,236
With non-missing entries for agreed benefit	N=1,396	N=2,327	N=3,723
With sufficient data to generate benefit/amount ratio	N=1,375	N=2,312	N=3,687
Used for net worth/benefit/judgment proof analyses	N=1,371	N=2,309	N=3,680

Source: JARD.

Findings have not been weighted. Many JARD data fields are optional, and consequently may be skipped by FIs entering their confiscation order data (see Table 5.2, below, which sets forth data fields and associated data availability). Responding to optional queries seems to be down to FI personalities; some FIs appear to not mind

[66] In other words, in only seven of 3,687 confiscation orders was order amount greater than agreed benefit.

the data-entry process, while others do. Various non-response analyses suggest that non-response bias, while present, is manageable without weighting.[67]

Table 5.2. Number of JARD Records With Valid (i.e. Non-Missing) Data

Variable	*Total*
Overall confiscation orders	N=4,236
Order amount	N=4,236
Agreed benefit	N=3,723
Age	N=4,120
Gender	N=4,017
Ethnicity	N=2,301
Primary offence	N=4,236
Associated ML offence	N=4,236
Type of criminal conduct	N=2,896
Specific assets information	N=1,449

Source: JARD.

Means are displayed in many of the tables below, as they are most easily interpreted/understood. But the criminal benefit and net worth variables are non-normally distributed. Comparing means for statistically significant differences typically requires normally distributed data, though larger sample sizes may sufficiently overcome this requirement. Data transformations (natural logs, which yield normally distributed data in this case—which can then be compared in standard compare-means fashion) and nonparametric tests such as the Kruskal-Wallis test (the nonparametric equivalent of one-way ANOVA) were used to further explore associations between variables, though such analyses are generally only referred to in the body of the text (i.e. without tables).

Personal-Criminal Characteristics

Personal characteristics of the JARD data (i.e. for the 3,680 records) are presented in Table 5.3. In sum (ignoring non-responses), nearly 90 percent of

[67] For example, the difference in means for the *order amount* variable between the group of confiscation orders for which the *agreed benefit* exceeds or equals the *order amount* and the group for which this is not the case is not statistically significant at the $p<0.05$ level. The same can be said for the *agreed benefit variable*. Differences in means were also checked for natural log transformations of order amount and agreed benefit (as the two have non-normal distributions); these are not significant either.

offenders in the JARD sample are male; roughly 68 percent are in their 20s and 30s; and more than two-thirds are white (though note the high number of non-responses here). JARD does not contain more detailed personal information, unfortunately (i.e. there is no information on marital status, dependents, occupation, and educational attainment, all of which might affect criminality).

Table 5.3. Personal Characteristics

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Gender					
Valid	Male	3,133	85.1	89.6	89.6
	Female	365	9.9	10.4	100.0
	Total	3,498	95.1	100.0	
Missing	No response	182	4.9		
Total		3,680	100.0		
Age					
Valid	20-29	1,283	34.9	35.7	35.7
	30-39	1,151	31.3	32	67.6
	40-49	740	20.1	20.6	88.2
	50-59	306	8.3	8.5	96.7
	60-69	105	2.9	2.9	99.6
	70-79	13	0.4	0.4	100
	Total	3,598	97.8	100	
Missing	No response	82	2.2		
Total		3,680	100.0		
Ethnicity					
Valid	Asian	202	5.5	9.8	9.8
	Black	305	8.3	14.8	24.6
	Mixed	48	1.3	2.3	26.9
	White	1,463	39.8	70.9	97.8
	Other	45	1.2	2.2	100.0
	Total	2,063	56.1	100.0	
Missing	No response	1,617	43.9		
Total		3,680	100.0		

Source: JARD. The 20-29 age range includes 81 offenders under age 20.

Criminal characteristics are presented in Table 5.4. These JARD data are dominated by the primary offence of drug trafficking (69 percent), followed by burglary/theft/handling/robbery (nearly 11 percent) and other fraud/embezzlement/ deception/crimes of dishonesty (nearly 10 percent).[68] The dominance of drug

[68] Note that primary offence classifications were drawn right from the JARD database, save for burglary/theft/handling/robbery, which is an amalgamation of burglary/theft, handling, and robbery (all (continued)

offences appears to be an artefact of a previous focus of asset recovery on drug offences almost exclusively—and, of course, because drug trafficking is viewed as one of the classical acquisitive crimes (it seems reasonable to assume that this dominance will change to some extent, perhaps due to things like the government's recent renewed focus on fraud). As an indicator, statistics for convictions in Crown Courts in England and Wales for 2004 suggest that drug offences represent only 14.2 percent of all non-motoring convictions; while an amalgamation of robbery, theft and handling, and burglary represents 29.8 percent of all non-motoring convictions (Home Office, 2005).

The primary offences were recoded into aggregate groups of drug dealing, other blue collar, and white collar (these classes are mentioned by Reuter and Truman (2004), and seem a sensible aggregation of the larger offence list); the aggregate classification allows for relationships between primary offences and other variables to be efficiently explored.[69] Some 68 percent of offences in the JARD sample were classified as drug dealing, while nearly 12 percent were other blue-collar, and 20 percent were white collar offences. Some 83 percent of confiscation orders in the sample were served for general, as opposed to particular, criminal conduct (though 28 percent of the 3,680 records had no response for this field). And, lastly, the use of associated money laundering charges (when the primary offence is not itself money laundering) appears rare, happening in only three percent of the JARD cases. Though there is no way to tell from the data alone, this is likely the case because: historically, money laundering as a change was shunned by police/prosecutors due to perceived and actual complexity in proving the charge, and it offered little marginal benefit.

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of which had very similar financial characteristics). Certain primary offences are not used in the present analysis, as they were either unspecified (classified as *not stated* in the JARD database), or appeared too infrequently (less than 0.5 percent of the time) to be of analytical benefit. These included people trafficking, terrorism, and vehicle offences.

[69] *Drug dealing* refers to the primary offence of *drug trafficking*; *other blue collar refers* to *burglary/theft/handling/robbery* and *pimps and brothels/prostitution/pornography*; and *white collar* refers to *counterfeiting/intellectual property/forgery, excise duty fraud, money laundering-drugs, money laundering-other, other fraud/embezzlement/deception/crimes of dishonesty, tax and benefit fraud*, and *VAT fraud*.

Table 5.4. Criminal Characteristics

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Primary offence					
Valid	Burglary/Theft/Handling/Robbery	372	10.1	10.5	10.5
	Counterfeiting/Intellectual Property/ Forgery	66	1.8	1.9	12.4
	Drug Trafficking	2,431	66.1	68.6	81.0
	Excise Duty Fraud	107	2.9	3.0	84.0
	Money Laundering-Drugs	56	1.5	1.6	85.6
	Money Laundering-Other	80	2.2	2.3	87.8
	Other Fraud/Embezzlement/ Deception/Crimes of dishonesty	345	9.4	9.7	97.6
	Pimps and Brothels/Prostitution/ Pornography	25	.7	.7	98.3
	Tax and Benefit Fraud	32	.9	.9	99.2
	VAT Fraud	29	.8	.8	100.0
	Total	3,543	96.3	100.0	
Missing	Not used	137	3.7		
Total		3,680	100		
Primary offence classification					
Valid	Drug dealing	2,431	66.1	68.2	68.2
	Other blue collar	418	11.4	11.7	79.9
	White collar	715	19.4	20.1	100.0
	Total	3,564	96.8	100.0	
Missing	Terrorism	1	.0		
	Not known	115	3.1		
	Total	116	3.2		
Total		3,680	100.0		
Type of criminal conduct					
Valid	General	2,202	59.8	83.3	83.3
	Particular	441	12.0	16.7	100.0
	Total	2,643	71.8	100.0	
Missing	No response	1,037	28.2		
Total		3,680	100.0		
Associated money laundering offence					
	No	3,559	96.7	96.7	96.7
	Yes	121	3.3	3.3	100.0
	Total	3,680	100.0	100.0	

Source: JARD. Crime types are pulled directly from JARD, save for burglary/theft/handling/robbery *which is an amalgamation of* burglary/theft, handling, *and* robbery.

Of course, it seems unlikely that acquisitive criminals are all alike. In particular, it seems fair to assume that criminals involved in duty offences, for example, are a different breed from those in the drug trade. Much of the later analyses use primary offence as the independent variable; primary offence is critical to the asset recovery process, as it determines whether or not the state can assume the

offender has a criminal lifestyle (thereby assuming that criminal benefit is equal to six years of proceeds, as opposed to one-off particular criminal conduct). And primary offence is assumed to play a role in the size of criminal proceeds (explored in more detail below).[70]

In the event, criminals involved in different offences do in fact appear to differ along a number of fronts in the JARD data. One important—and perhaps not surprising—relationship appears to exist between primary offence and age: JARD drug-related offenders were more likely to be younger, while white collar offenders (like excise duty fraudsters) were more likely to be in their 40s (though the relationship between age and primary offence does not appear to be overwhelmingly strong). Mean ages by primary offence are presented in Table 5.5 (sorted by descending mean age; between-group differences in means are significant at the $p<0.01$ level). It could be the case that the white collar offences command greater levels of education and/or professional experience, both of which we would expect to be associated with age. Unfortunately, JARD's lack of education and occupation data preclude unpacking this further.

Table 5.5. Age by Primary Offence

Primary offence	*Mean*	*N*	*Std. Deviation*	*Median*
Tax and Benefit Fraud	47.73	30	9.336	47.5
Excise Duty Fraud	45.66	105	9.341	44.0
VAT Fraud	41.62	29	11.712	40.0
Pimps and Brothels/Prostitution/ Pornography	40.96	25	11.946	41.0
Other Fraud/Embezzlement/ Deception/Crimes of dishonesty	39.45	341	12.317	38.0
Money Laundering-Other	39.34	77	12.943	36.0
Counterfeiting/Intellectual Property/Forgery	38.06	64	11.816	33.5
Money Laundering-Drugs	36.24	54	11.990	34.5
Burglary/Theft/Handling/Robbery	35.65	370	11.436	34.0
Drug Trafficking	33.58	2,369	10.173	32.0
Total	**35.24**	**3,464**	**11.084**	**34.0**

Source: JARD.

[70] Of course, there may be different likelihoods of investigation/prosecution/conviction depending on crime type, which will clearly affect the JARD data (which, as discussed, relate to convicted offenders who have been served confiscation orders).

JARD primary offence was also weakly associated with gender and with ethnicity. These were explored with cross-tabulations; all associations were significant (chi-square $p<0.01$). Female offenders—while vastly outnumbered by their male counterparts—did seem to exhibit marginally higher rates of participation in white-collar over drug and blue-collar offences than their male counterparts. The ethnicity relationship appears far more subtle; statistical significance here appears more an artefact of a large sample than strong underlying patterns.

The associated money laundering offence and criminal conduct variables both offer little of value to the present analyses. The former may have been misunderstood by FIs: 33 percent of the 136 JARD records for which there was an associated money laundering offence themselves were derived from primary offences of money laundering (i.e. money laundering-drugs or money laundering-other). This is suggestive of confusion and consequent double-counting. The criminal conduct data may be less salient here due to changes in POCA and its predecessors. Many of the confiscation orders in JARD (at least in this dataset; this will change as time passes) were pre-POCA orders. The legislation has changed such that general and particular criminal conduct were interpreted slightly differently in pre-POCA and POCA circumstances. So the criminal conduct variable may send conflicting messages, and is less a proxy for anything of interest (e.g. the seriousness of the crime(s)).

Financial Characteristics

Criminal benefit

JARD contains information on offenders' estimated criminal benefit, captured here with JARD's agreed benefit variable. (To reiterate, criminal benefit refers to the estimated gross proceeds of the particular criminal offence or the general course of criminality in question, up to six years in length.) Criminal benefit as a concept is not without complications, however. In the UK, the benefit amount may include income levels never actually received by the offender, since no expenses may be deducted in the proceeds-not-profits approach. Also, there is no timeframe involved here, so it's not possible to consider criminal benefit in any way as criminal income per unit time. This is unfortunate, as it limits the ability to compare these data with other studies of criminal and legitimate income.

Criminal benefit identified in JARD is useful in indicating the relative income-generating capacity of various crime types. JARD Agreed benefit ranged from 0 to 156,577,417 GBP (see Table 5.6). While the maximum is an outlier (a VAT fraud), it is striking how large this number is. Another outlier is on the order of some 112 million GBP, and a few others are less large but still of considerable magnitude (between 10 and 18 million GBP). These are likely not outliers in the classic sense, but rather simply the values of criminal benefit for extremely profitable crimes. The difference between the mean and median are illustrative of the skewness of the distribution.

Table 5.6. Criminal Benefit (Agreed Benefit)

N	*Min.*	*Max.*	*Sum*	*Mean*	*Std. Deviation*	*Median*
3,680	£1	£156,577,417	£834,306,601	£226,714	£3,243,795	£12,388

Source: JARD.

Mean criminal benefit differed quite considerably in the sample by primary offence, not surprisingly (see Table 5.7, sorted by descending mean estimated benefit). Between-group differences in means are significant at the $p<0.01$ level (i.e. differences between means exist for at least two of the primary offences); this is also the case with natural log transformations. The Kruskal-Wallis test similarly suggests a statistically significant association between agreed benefit and primary offence ($p<0.01$). Differences between primary offences are clearest when offences are classified into the drug dealing, other blue collar, and white collar categories. As with the specific offence types discussed above, between-group differences in means in the sample are significant at the $p<0.01$ level; this is also the case with natural log transformations. The Kruskal-Wallis test similarly suggests a statistically significant association between agreed benefit and primary offence classification ($p<0.01$).

While being cautious of widely different Ns for each primary offence, the magnitude of the agreed benefit means for VAT fraud is remarkable. One wonders why more offenders aren't in fact VAT fraudsters (the differences in means between the VAT fraud and excise duty fraud, next on the list for highest estimated benefit, are significant for the agreed benefit variable). It may be the case that VAT fraud is sufficiently complex (particularly when compared to, say, drug-related offences) that

fewer offenders understand the offence and its modus operandi.[71] Along these lines, white collar offences appear to yield the highest criminal benefit (save for the pimps/brothels/etc. offence). Median values are considerably smaller than the means, though still illustrate the relative earning potential of the different crime types.

Table 5.7. Criminal Benefit (Agreed Benefit) by Primary Offence

	Mean	*N*	*Std. Deviation*	*Median*
Primary offence				
VAT Fraud	£10,557,368	29	£34,849,260	£619,040
Money Laundering-Other	£644,765	80	£1,630,239	£100,426
Other Fraud/ Embezzlement/ Deception/Crimes of dishonesty	£328,499	345	£1,312,941	£41,003
Excise Duty Fraud	£320,557	107	£552,783	£100,000
Pimps and Brothels/Prostitution/ Pornography	£299,091	25	£449,714	£66,829
Counterfeiting/Intellectual Property/Forgery	£186,097	66	£341,525	£36,768
Money Laundering-Drugs	£158,689	56	£319,525	£43,854
Tax and Benefit Fraud	£128,867	32	£274,116	£34,459
Drug Trafficking	£95,410	2,431	£509,617	£6,000
Burglary/Theft/Handling/ Robbery	£91,069	372	£238,610	£21,417
Total	**£226,917**	**3,543**	**£3,304,435**	**£11,691**
Primary offence classification				
White collar	£742,195	715	£7,274,161	£51,954
Other blue collar	£109,955	418	£281,755	£23,328
Drug dealing	£95,410	2,431	£509,617	£6,000
Total	**£226,872**	**3,564**	**£3,294,932**	**£11,980**

Source: JARD.

JARD agreed benefit is correlated with age ($p<0.05$ level), though not strongly so (the relationship is stronger between age and the natural log of the benefit variable). This may be the case because the white collar crime types like VAT fraud and excise duty fraud command a more mature offender (this is consistent with the research on white-collar offenders; see, for example, Wesiburd et al, 1990). The difference in means between male and female offenders for the benefit variable is not significant. This may be down to the non-normality of the distribution; the difference

[71] Of course, it may indeed be the case that offenders are turning to VAT fraud in droves, but they're simply not getting prosecuted/convicted and pursued for confiscations. This may be the case because law enforcement (HMCE/HMRC in this case) does not completely understand VAT fraud, or has other competing priorities.

in means between male and female offenders for the logged transformation of benefit is indeed significant at the $p<0.01$ level, and the Kruskal-Wallis test suggests a statistically significant relationship between gender and criminal benefit. Between-group means differ for ethnicity ($p<0.01$; the same can be said for the logged transformation of benefit and also the Kruskal-Wallis test). Mean and median differences between criminal benefit and age range, gender, and ethnicity are presented in Table 5.8.

Table 5.8. Criminal Benefit (Agreed Benefit) by Age Range, Gender, and Ethnicity

	Mean	*N*	*Std. Deviation*	*Median*
Age range				
<40	£218,177	2,343	£4,007,360	£9,081
>=40	£269,541	1,164	£967,725	£30,994
Total	**£235,225**	**3,507**	**£3,322,434**	**£12,800**
Gender				
Male	£250,156	3,133	£3,510,858	£12,130
Female	£65,462	365	£253,469	£9,560
Total	**£230,884**	**3,498**	**£3,324,073**	**£12,000**
Ethnicity				
Asian	£815,266	202	£7,931,356	£21,143
Black	£150,539	305	£817,375	£10,293
Mixed	£3,449,418	48	£22,595,555	£6,083
White	£177,373	1,463	£711,501	£16,621
Other	£109,112	45	£172,905	£35,000
Total	**£310,508**	**2,063**	**£4,301,048**	**£16,276**

Source: JARD.

Net worth

JARD also contains proxy information on offenders' net worth (wealth), as noted above. Net worth (or a proxy thereof) is captured in the JARD order amount variable (the amount for which the court ultimately served the confiscation order). The variable broadly refers to a sum of the value of the assets which might be used to satisfy a confiscation order, typically including funds held in bank accounts, insurance, real estate, vehicles, and other savings vehicles—net of financing, such as mortgages. JARD order amount ranged from 0 to 18,648,679 GBP (see Table 5.9), the largest being an offence of "other fraud/embezzlement/deception/crimes of

dishonesty". The next four outliers (all with values of more than 5 million GBP) represent three white collar offences and one drug offence. The net worth variable displays a similarly skewed distribution (with the median being far less than the mean net worth). All offenders in the sample had positive net worth.

Table 5.9. Net Worth (Order Amount)

N	*Min.*	*Max.*	*Sum*	*Mean*	*Std. Deviation*	*Median*
3,680	£0	£18,648,679	£180,236,233	£48,977	£422,419	£1,938

Source: JARD.

Mean net worth differed quite considerably by primary offence, as with criminal benefit (see Table 5.10, sorted by declining mean order application). Between-group differences in means are significant at the $p<0.01$ level, suggesting that differences between means exist for at least two of the primary offences; this is also the case with natural log transformations. The Kruskal-Wallis test similarly suggests a statistically significant association between order amount and primary offence ($p<0.01$). Differences between primary offences are again made clearer when offences are classified into the drug dealing, other blue collar, and white collar categories. Between-group differences in means are significant at the $p<0.01$ level; this is also the case with natural log transformations. The Kruskal-Wallis test similarly suggests a statistically significant association between order amount and primary offence classification ($p<0.01$).

The magnitude of the order amount mean for VAT fraud is striking, as above with criminal benefit (it is decidedly less than the VAT fraud agreed benefit variable, however; this is discussed in detail in the judgment proof section, below). White collar offences similarly appear to yield the highest net worth—though the pimps/brothels/etc. offence remains a blue-collar contender. The order of median net worth tracks the rank order of the mean in terms of offences, though less well than with criminal benefit.

Table 5.10. Net Worth (Order Amount) by Primary Offence

	Mean	*N*	*Std. Deviation*	*Median*
Primary offence				
VAT Fraud	£661,843	29	£1,633,178	£39,586
Other Fraud/Embezzlement/ Deception/Crimes of dishonesty	£165,248	345	£1,160,117	£13,000
Pimps and Brothels/Prostitution/ Pornography	£123,280	25	£193,374	£20,000
Excise Duty Fraud	£94,327	107	£190,154	£24,000
Money Laundering-Other	£90,366	80	£117,234	£47,872
Counterfeiting/Intellectual Property/Forgery	£69,947	66	£153,551	£11,073
Tax and Benefit Fraud	£65,209	32	£108,678	£30,480
Money Laundering-Drugs	£60,149	56	£112,287	£13,899
Burglary/Theft/Handling/Robbery	£30,174	372	£91,015	£3,070
Drug Trafficking	£23,151	2,431	£190,099	£1,063
Total	**£49,163**	**3,543**	**£429,965**	**£1,840**
Primary offence classification				
White collar	£144,892	715	£881,299	£19,493
Other blue collar	£37,058	418	£104,787	£3,430
Drug dealing	£23,151	2,431	£190,099	£1,063
Total	**£49,205**	**3,564**	**£428,826**	**£1,871**

Source: JARD.

JARD *order amount* is correlated with age (at the $p<0.01$ level), though not strongly so (the relationship is slightly stronger between age and the natural log of the variable). The difference in means between male and female offenders for *order amount* is not significant. Between-group differences in means are not significant for *order amount* and ethnicity (this is the case with both standard and logged transformations of the variable), though the Kruskal-Wallis test does suggest a statistically significant relationship between ethnicity and the *order amount* variable. Mean and median differences between net worth and age range, gender, and ethnicity are presented in Table 5.11.

Table 5.11. Net Worth (Order Amount) by Age Range, Gender, and Ethnicity

	Mean	*N*	*Std. Deviation*	*Median*
Age range				
<40	£24,739	2,343	£202,166	£1,251
>=40	£102,676	1,164	£690,798	£7,355
Total	**£50,607**	**3,507**	**£432,371**	**£2,000**
Gender				
Male	£52,633	3,133	£453,369	£1,885
Female	£17,395	365	£42,477	£1,900
Total	**£48,956**	**3,498**	**£429,411**	**£1,895**
Ethnicity				
Asian	£79,838	202	£518,804	£7,243
Black	£86,028	305	£720,840	£2,650
Mixed	£132,916	48	£739,291	£1,960
White	£57,613	1,463	£509,715	£3,407
Other	£29,849	45	£49,375	£5,769
Total	**£65,136**	**2,063**	**£547,561**	**£3,480**

Source: JARD.

Judgment proof status

At the heart of the matter is offenders' judgment proof status, which is determined by the net worth and criminal benefit of offenders. The issue is this: do offenders maintain sizable bank accounts and/or purchase expensive houses and cars which may be recovered by the authorities (or sold to satisfy confiscation orders), or do they seem to spend licit and illicit proceeds on non-recoverable nondurable goods and services? Or, put more simply (and more easily testable), is offender net worth greater than the identified benefit from crime?

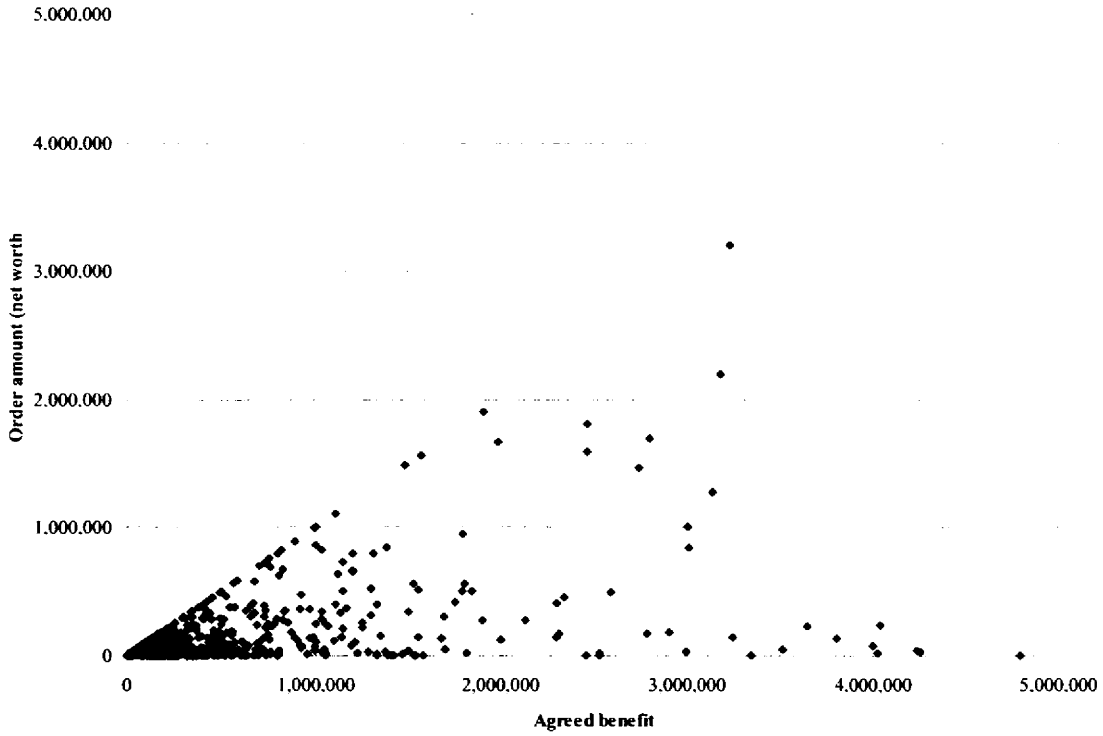
A judgment proof offender is defined in the present context as one whose ratio of net worth to criminal benefit is less than one, using the order amount and agreed benefit variables, respectively. The judgment proof ratio ranges from 0 to 1, with a mean of 0.47 (N=3,680; see Table 5.12 and Figure 5.2). The judgment proof score differs by the size of the order amount, whereby the larger the amount, the higher the judgment proof ratio score (between-group means are significant at the $p<0.01$ level; the Kruskal-Wallis test similarly suggests an association between the judgement proof score and aggregate order amount; see Table 5.13).

Table 5.12. Judgment Proof Ratio

N	*Min.*	*Max.*	*Mean*	*Std. Deviation*	*Median*
3,680	0	1.00	0.4715	0.4014	0.3801

Source: JARD.

Figure 5.2. Scatterplot of Agreed Benefit and Order Amount



Source: JARD. Outliers of more than 5,000,000 GBP (18 in total) have been dropped for both variables, so N=3662). No points lie above the 45-degree line because only records for which agreed benefit equals or exceeds order amount are used in the analysis.

Table 5.13. Judgment Proof Score by Aggregate Order Amount

Order Amount (aggregated)	*Mean*	*N*	*Std. Deviation*	*Median*
Low (<50,000 GBP)	0.4503	3,204	0.40578	0.3325
Medium (50,001-250,000 GBP)	0.6074	356	0.34635	0.5985
High (>250,000 GBP)	0.6354	120	0.31193	0.6280
Total	**0.4715**	**3,680**	**0.40141**	**0.3801**

Source: JARD.

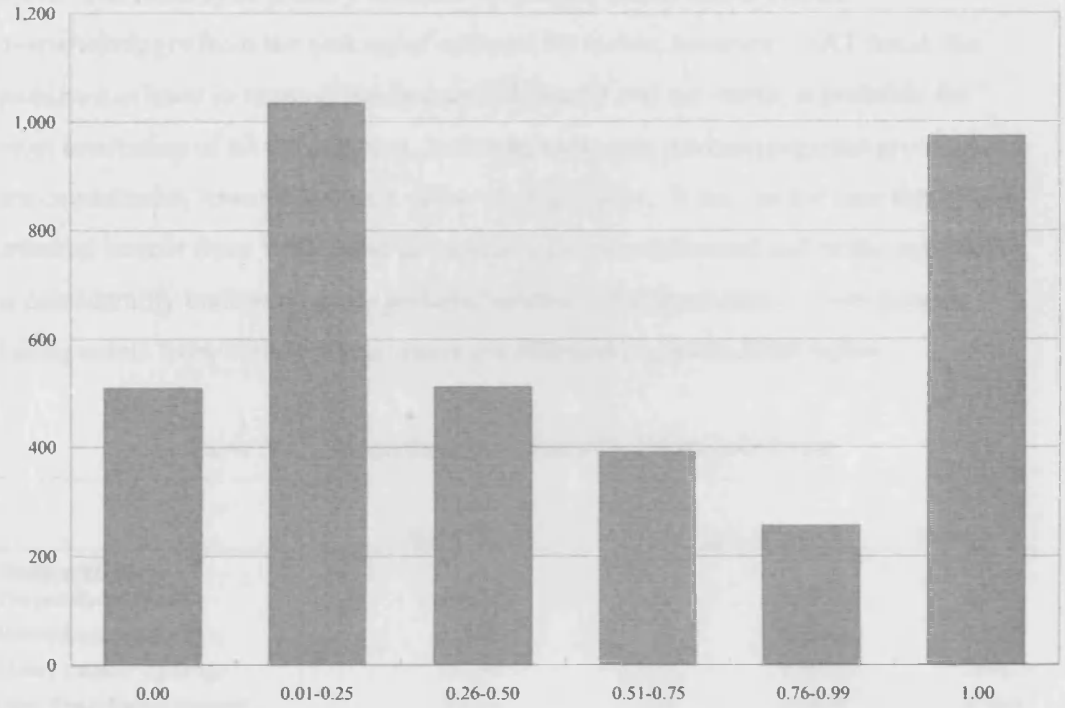
Some 974 (26.5 percent of the sample) has an order amount which does indeed match agreed benefit (a judgment proof score of one implies that the order amount equals the agreed benefit; this may happen with greatest frequency when FIs search for assets until the value reaches that of the criminal benefit). But this implies that the rest—some 73.5 percent of this sample—is judgment proof under Shavell's definition (see Table 5.14 and Figure 5.3). This is a critical, if not surprising, finding: it implies that nearly three quarters of the offenders in the sample have net worth which is valued at less than the estimate of the benefit generated by the crime or crimes for which they are responsible. And some 42 percent of the sample has net worth which is valued at only 25 percent or less of the benefit generated.

Table 5.14. Judgment Proof Ratio Frequencies

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	0.00	509	13.8	13.8	13.8
	0.01-0.25	1,034	28.1	28.1	42.0
	0.26-0.50	512	13.9	13.9	55.9
	0.51-0.75	393	10.7	10.7	66.6
	0.76-0.99	256	7.0	7.0	73.5
	1.00	974	26.5	26.5	100.0
	Total	3,678	99.9	100.0	
Missing	System	2	.1		
Total		3,680	100.0		

Source: JARD.

Figure 5.3. Frequency Distribution of Judgment Proof Scores



Source: JARD. Note the scale is non-linear in that it exaggerates the very bottom and very top of the spectrum (i.e. it presents separate categories for those who are entirely judgment proof—with a judgment proof ratio of 0.00—and those who are in no way judgment proof—with a judgment proof ratio of 1.00; a linear scale would aggregate the 0.00 category in with the 0.01-0.25 and the 1.00 category in with the 0.76-0.99).

Judgment proof status in the sample varies by primary offence, not surprisingly (see Table 5.15, sorted by descending mean judgment proof ratio score, and Figure 5.4). Between-group means are significant at the $p<0.01$ level; the Kruskal-Wallis test similarly suggests an association between the judgement proof score and primary offence ($p<0.01$). The same can be said for differences in mean judgment proof scores between primary offence classes or drug dealing, blue collar, and other white collar offences. Interestingly, though, for the bulk of the primary offences, judgment proof status doesn't appear to differ in a truly meaningful way in terms of means (statistical significance, of course, doesn't necessarily imply meaningful difference). That is, the mean judgment proof score for most of the primary offences hovers around 0.5, give or take—save for tax and benefit fraud; money laundering-other; money laundering-drugs (for which the judgement proof score is higher); and burglary/theft/handling/robbery and VAT fraud (for which the score is lower). Median judgement proof scores exhibit a much broader range (note

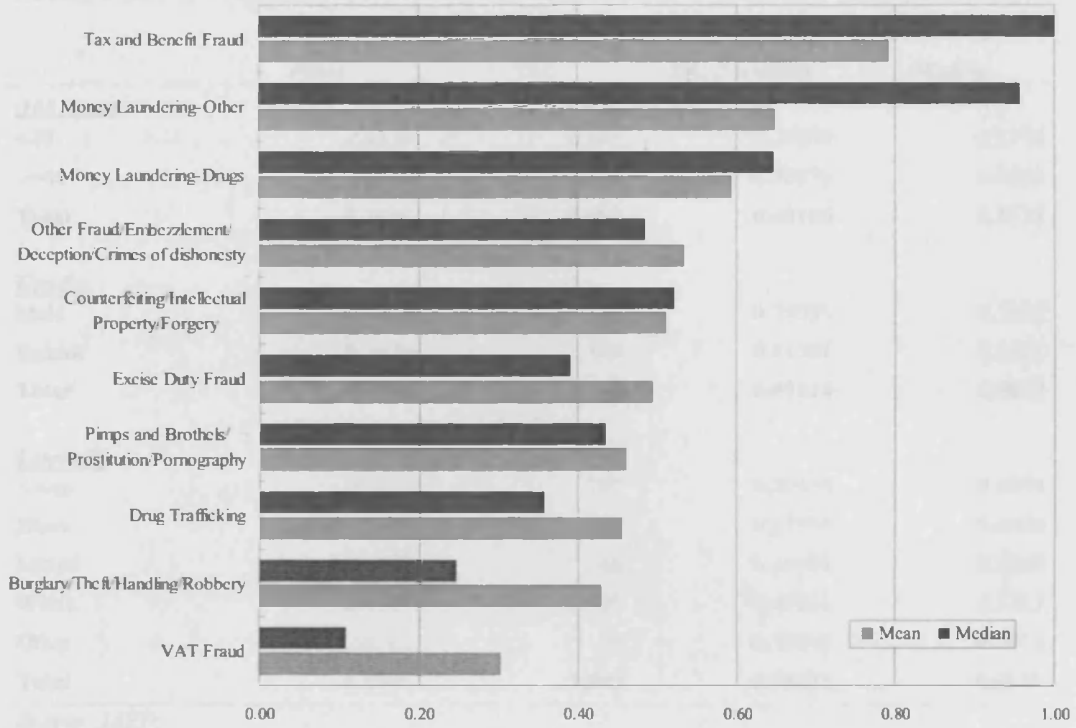
the median tax and benefit fraud score of 1.00 and the median VAT fraud score of 0.11). The ranking of primary offences by median scores doesn't differ overwhelmingly from the ranking of offences by means, however. VAT fraud, the dominant offence in terms of mean criminal benefit and net worth, is probably the most interesting of all the offences, in that its mean and median judgment proof scores are considerably lower than those of the other offences. It may be the case that either criminal benefit from VAT fraud is considerably over-estimated and/or the net worth is considerably underestimated (perhaps because VAT fraudsters are very good at hiding assets from view). These issues are addressed in more detail below.

Table 5.15. Judgment Proof Score by Primary Offence

	Mean	*N*	*Std. Deviation*	*Median*
Primary offence				
Tax and Benefit Fraud	0.7901	32	0.34734	1.0000
Money Laundering-Other	0.6486	80	0.40865	0.9557
Money Laundering-Drugs	0.5947	56	0.38613	0.6462
Other Fraud/Embezzlement/ Deception/Crimes of dishonest	0.5345	345	0.40886	0.4864
Counterfeiting/Intellectual Property/Forgery	0.5122	66	0.39642	0.5232
Excise Duty Fraud	0.4945	107	0.43169	0.3913
Pimps and Brothels/ Prostitution/Pornography	0.4618	25	0.38993	0.4360
Drug Trafficking	0.4562	2,431	0.39143	0.3585
Burglary/Theft/Handling/Robbery	0.4300	372	0.42798	0.2469
VAT Fraud	0.3017	29	0.35779	0.1091
Total	**0.4716**	**3,543**	**0.40127**	**0.3805**
Primary offence classification				
White collar	0.5460	715	0.41202	0.5397
Drug dealing	0.4562	2,431	0.39143	0.3585
Other blue collar	0.4308	418	0.42305	0.2647
Total	**0.4712**	**3,564**	**0.40116**	**0.3801**

Source: JARD.

Figure 5.4. Mean and Median Judgment Proof Score by Primary Offence



Source: JARD.

The judgment proof ratio score is correlated with age (at the $p<0.01$ level), though not strongly so. The difference in means in the sample between younger and older offenders and also between male and female offenders for the judgment proof score is significant ($p<0.01$); these findings are supported by the Kruskal-Wallis test ($p<0.01$). Between-group differences in means are not significant for judgment proof score and ethnicity. Mean and median differences between judgment proof ratio score and age range, gender, and ethnicity are presented in Table 5.16.

Table 5.16. Judgment Proof Score by Age Range, Gender, and Ethnicity

	Mean	*N*	*Std. Deviation*	*Median*
Age range				
<40	0.4429	2,343	0.39834	0.3333
>=40	0.5214	1,164	0.40376	0.4882
Total	**0.4689**	**3,507**	**0.40180**	**0.3733**
Gender				
Male	0.4650	3,133	0.39999	0.3692
Female	0.5378	365	0.41501	0.5407
Total	**0.4726**	**3,498**	**0.40214**	**0.3849**
Ethnicity				
Asian	0.5028	202	0.39653	0.4854
Black	0.5198	305	0.37939	0.4960
Mixed	0.6092	48	0.35938	0.5960
White	0.4793	1,463	0.40116	0.3733
Other	0.4705	45	0.38843	0.4813
Total	**0.4904**	**2,063**	**0.39671**	**0.4138**

Source: JARD.

What, then, did these offenders do with their criminal benefit, particularly if they held only some percentage thereof (47 percent on average, if the JARD sample is any guide)? Six options—which are not mutually exclusive—prevail: 1) offenders spent the difference (or part of it) on non-recoverable nondurable goods and services; 2) offenders originally invested in depreciating assets; 3) offenders reinvested the difference in their own or others' criminal enterprise; 4) offenders practised successful avoidance activity; 5) the authorities under-estimated net worth; and 6) offenders never had the money in the first place—the authorities over-estimated their benefit from crime.[72] These possibilities are discussed in turn:

- **Non-recoverable nondurable goods and services**: Life has costs, and all members of society, criminal or not, will have financial obligations. Ignoring housing costs (which may in some way be recoverable if they lead to home ownership), these will include utilities, food, clothing, travel costs, medical/dental

[72] Of course, it is also possible that the ratio of assets to criminal benefit may be over-stated. For example, FIs may underestimate criminal benefit (the denominator of the equation) for various reasons.

expenses, tax payments, and, optionally, school fees, holidays, alcohol, drugs, prostitutes, gambling, and the like.[73] Such expenses cannot be reclaimed by the state.

- **Depreciating assets**: Even if all criminal income has been placed into potentially recoverable assets, these assets may depreciate over time. Cars represent a standard example of a depreciating asset: drive it off the lot, and your new car is now worth less than when it was parked in the showroom five minutes ago. But other assets may similarly depreciate, depending on a number of factors. While real estate has generally appreciated, market corrections or sharp downturns have occurred in most countries in the last 50 years. And micro-level factors occasionally effect decreases in value (imagine a house sited next to land being considered for the next nuclear energy plant). Financial assets similarly go through periods of boom and bust, or stagnant growth (i.e. real depreciation). So depending on offenders' luck and/or investment ability, their asset portfolios may have shrunk over time.

- **Criminal reinvestment**: Along the lines of avoidance activity, offenders may choose to invest part of their wealth in further criminal activity. In fact, bankrolling others' criminality may represent one avoidance strategy: assets are parked in the hands of others who must repay the loans at a specified future time (perhaps under threat of violence). In this way, the risk is shared (if not fully farmed-out) with the bank-rolled offenders. Asset recovery may be thought of as a stochastic tax on criminal behaviour. To some extent, criminal reinvestment might represent a rational shift from capital to labour; it is much more difficult for the state to tax this labour (i.e. human capital). Interestingly, one implication of this is that asset recovery policies might prompt continuing criminal involvement by those who might otherwise retire from crime.[74]

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[73] On housing costs: mortgage interest costs and/or rental payments are not recoverable, and may be of considerable size. Confiscations which require the sale of the family home (to satisfy the confiscation order) are not always easy, in that such a sale displaces the spouse and children, who some judges may feel were not responsible for the criminality, even though they may have enjoyed its rewards.

[74] There might then be more inter-generational lending between criminals; a greater availability of finance for crimes requiring large capital investments; and a greater need for the enforcement infrastructure to ensure that these debts are repaid.

- **Avoidance activity**: It is very difficult to imagine that offenders will not take efforts to hide the existence and location of recoverable assets. Their ability at doing so, however, will differ, as will law enforcement's ability in finding hidden assets.[75] Offenders may employ third parties (e.g. family/friends/associates) to purchase and hold assets. Or assets may be purchased/parked offshore, perhaps in offshore trusts/bank accounts or perhaps property—and indeed offshore holdings may be in the name of third-parties. Of course, increases in financial investigator efficiency, better law enforcement intelligence/information, and more international cooperation can all reduce the efficacy of offenders' avoidance activity. But with the present data, the use of avoidance activity skews the findings such that the judgment proof nature of the sample is over-estimated.

- **Under-estimation of net worth**: A corollary of this is that FIs take no more than a cursory look at assets, underestimating offenders' un-hidden net worth out of convenience or perhaps to avoid spending scarce investigative resources (once an FI has found as much as the state will be able to confiscate—i.e. criminal benefit—there's little point in searching for more). This seems likely for at least some confiscation investigations. Further, perhaps the findings are the result of an insufficiently appropriate proxy: perhaps the JARD order amount variable under-estimates net worth. There is (limited) anecdotal evidence that some judges have not fully embraced asset recovery and/or feel that the confiscation of all available assets is draconian (though it is often said that the legislation was written to be draconian); in these cases, order amount will potentially under-estimate net worth.

- **Over-estimation of criminal benefit**: It is possible that the state will over-estimate, perhaps dramatically so, offenders' criminal benefit. Due to the nature of the proceeds v. profits approach, it is likely that at least a portion of the criminal benefit will represent expenses which were never recovered by the offender. And in the event that an offender is arrested in possession of contraband which is subsequently seized, it may be the case that the contraband is valued at

[75] Avoidance activity may be costly (in fact, these costs are socially wasteful), and not all offenders will be willing/able to spend potentially scarce resources on avoidance.

what may be an inappropriate price (e.g. drugs seized and valued at street as opposed to wholesale price; stolen goods valued at replacement as opposed to resale value).

What are the implications for asset recovery? If the JARD sample is representative of all acquisitive offenders—and not just those who get caught—then these judgment proof findings may temper our faith in asset recovery's deterrent effect. Bearing in mind that offenders are not likely to be arrested/convicted with probability of one (i.e. 100 percent of the time), then truly deterrent sanctions would need to be some multiple of the estimate of the criminal harm. But here we're seeing that rather than a multiple of criminal benefit (i.e. of agreed benefit), only a fraction is available for recovery.

This is not to suggest, however, that the policy should have no impact on crime. Asset recovery penalties are typically served in conjunction with nonmonetary sanctions, like imprisonment. That is, confiscations are part of the overall punishment picture, and accompany prison sentences. The two together may represent a sufficient deterrent, whereas the two in isolation might not. Because we can't know ex ante whether offenders will be judgment proof with respect to monetary sanctions and/or have low disutility of prison, having both forms of punishment is very likely the right way to go.[76] In fact, these findings confirm the importance of imprisonment as a complement to, not substitute for, asset recovery-style sanctions.

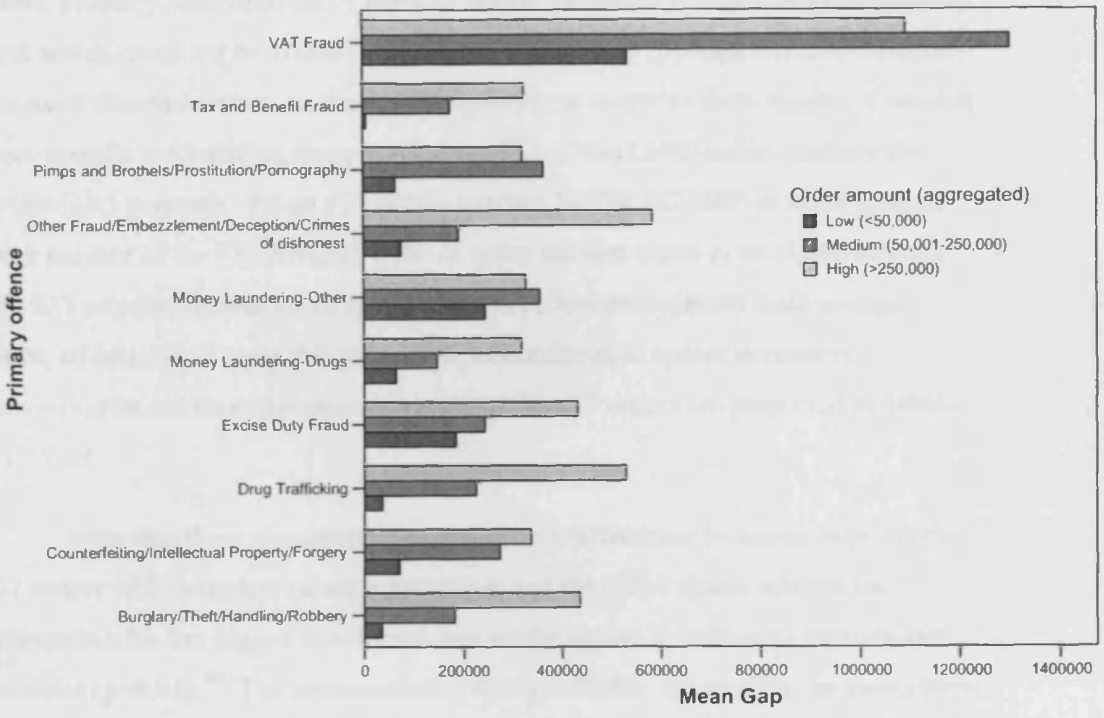
Moreover, no doubt asset recovery (and other monetary sanctions) should deter at least a subset of offenders. This subset might include offenders whose crime type(s) carry a greater likelihood of arrest/conviction (thus requiring a smaller multiple of the criminal harm to deter). Further, for those offenders who carry out crime which meets the criteria for recovering the proceeds of general criminal conduct (i.e. the proceeds of a criminal lifestyle going back some six years into the past), asset recovery may have the capacity to deter. This is the case because for each subsequent

[76] If offenders have a low disutility of imprisonment, yet are judgment proof in terms of financial penalties, then there is little to deter them from crime. Imprisonment, however, will still prevent (most) criminality due to incapacitation.

crime, the offender considers whether or not to carry out the offence based on a subjective analysis of the marginal benefits and costs of doing so. With asset recovery policies in place, the cost of the "next" crime to the offender if caught will include not only the harm (proceeds) of that particular crime, but also of previous crimes which the offender may have gotten away with. So even if some 47 percent or more of the six years of criminal benefit is no longer available for recovery, this may still be enough to deter the "next" offence. Of course, for offenders facing a confiscation for particular criminal conduct—unlike general criminal conduct allowing the state to recover six years of proceeds—if the average offender's spending behaviour is such that less will remain for confiscation than the benefit of the crime in question, the deterrent effect is indeed watered-down.

What these findings also raise is the possibility that depending on the goals/targets of asset recovery (e.g. reduce crime, raise revenue, etc.), it may be most efficient to target particularly large or small orders and particular crime types—if, as above, particular crime types are more likely to exhibit large benefit and/or order amounts—and small gaps (where the gap between order amount and agreed benefit is another way of thinking of judgment proofness) between the two (see Figure 5.5). For example, if law enforcement in the UK—as we know—is seeking to meet targets on growing year-on-year confiscation order amounts, then law enforcement perhaps should consider undertaking a linear programming effort to design an strategy that optimises confiscation receipts subject to the spending and saving behaviour relating to certain crime types (and, of course, constraints relating to capacity in the criminal justice system). If the goal is to reduce harm, then it might be best to focus on those crime types generally seen to be the most harmful to society (e.g. based on the Home Office work on harms and the costs of crime; see Dubourg and Prichard, 2007). To complicate matters further, an effective strategy might also be to focus on the crime types most likely to yield large recoveries—but then to use those recovered proceeds to fund law enforcement efforts fighting the most harmful crimes. The present findings do not allow us to design the definitive law enforcement strategy going forward, but they do allow us to start thinking of these things in much greater detail.

Figure 5.5. Gap Between Order Amount and Agreed Benefit by Primary Offence



Source: JARD.

5.3.2. Offenders' Saving Behaviour

So what did the offenders in the sample do with their ill-gotten (as well as any legitimate) gains? This section explores asset holding behaviour, in terms of offenders' stock of assets upon arrest/conviction/confiscation. This section is more speculative than the judgment proof section above, as JARD data quality is more of a concern here. Many fewer records are used in the analyses below than in those above (which is one reason why this section is distinct).

JARD contains some information on offenders' specific assets (i.e. those comprising available amount), though in open-text format and only for a subset of the confiscation orders.[77] Assets were coded from the open-text descriptor field into the following types: antiques, art, business, cash, financial assets-bank/building society, financial assets-general insurance products, financial assets-life assurance products,

[77] As noted, asset-specific data are captured in optional data fields, and not all FIs provided the optional information.

financial assets-pension products, financial assets-other, jewellery, other physical assets, property, and vehicles.[78] Records which contained at least one asset-specific field which could not be coded into an existing category (perhaps because the open-text asset description was unclear) were ignored, so as not to skew results. Complete asset-specific information was provided for 937 of the 3,680 usable confiscation orders (25.5 percent). These 937 orders capture 30,378,207 GBP of order amount (16.9 percent of the 180,236,233 GBP of order amount found in the 3,680 orders).[79] The 937 records discuss 1,878 specific assets (offenders typically hold multiple assets, of course). To put this subsample of confiscation orders in context, personal/criminal/financial characteristics of the 937 orders are presented in Tables 5.17-5.19.

Note that there are statistically significant differences in means between the 937 orders with complete assets information and the 2,734 orders without such information for the logged transformations of the agreed benefit and order amount variables ($p<0.01$).[80] The nonparametric Kruskal-Wallis test suggests an association between having complete assets information and the agreed benefit variable ($p<0.01$), but not the order amount variable. Findings have not been weighted. It is not clear how the data could best be weighted, and weighting could do more harm than good. The analyses below should be treated as speculative until better data can support or refute the findings. Briefly, the subsample is not dissimilar to the broader sample used above in the judgment proof section in terms of gender, age, and ethnicity. Drug dealing offences seem to be slightly over-represented in comparison to the broader JARD sample, while other blue collar and white collar offences are slightly under-represented.

[78] There is certainly a call for JARD to be modified in the asset-specific fields to include a field with pre-selected answer choices describing assets (along the lines of the coding used here).

[79] The total value of the assets identified for these 937 records (37,389,999 GBP) exceeds that captured in *order amount* (30,378,207). This may be the case because the assets identified will generally have been done so by FIs independent of the court's assessment of benefit and order amount.

[80] Differences in means are not significant for the original, non-transformed values of the benefit and amount variables, however. This is likely due to the non-normality of the distributions.

Table 5.17. Asset-Specific Subsample Personal Characteristics

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Gender					
Valid	Male	807	86.1	89.0	89.0
	Female	100	10.7	11.0	100.0
	Total	907	96.8	100.0	
Missing	No response	30	3.2		
Total		937	100.0		
Age					
Valid	20-29	311	33.2	34.4	34.4
	30-39	304	32.4	33.6	68.0
	40-49	182	19.4	20.1	88.2
	50-59	75	8.0	8.3	96.5
	60-69	28	3.0	3.1	99.6
	70-79	4	.4	.4	100.0
	Total	904	96.5	100.0	
Missing	No response	33	3.5		
Total		937	100.0		
Ethnicity					
Valid	Asian	46	4.9	8.2	8.2
	Black	105	11.2	18.6	26.8
	Mixed	14	1.5	2.5	29.3
	White	389	41.5	69.0	98.2
	Other	10	1.1	1.8	100.0
	Total	564	60.2	100.0	
Missing	No response	373	39.8		
Total		937	100.0		

Source: JARD.

Table 5.18. Asset-Specific Subsample Criminal Characteristics

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Primary offence					
Valid	Burglary/Theft/Handling/Robbery	51	5.4	5.6	5.6
	Counterfeiting/Intellectual Property/ Forgery	11	1.2	1.2	6.8
	Drug Trafficking	715	76.3	78.1	84.8
	Excise Duty Fraud	26	2.8	2.8	87.7
	Money Laundering-Drugs	14	1.5	1.5	89.2
	Money Laundering-Other	24	2.6	2.6	91.8
	Other Fraud/Embezzlement/ Deception/Crimes of dishonesty	58	6.2	6.3	98.1
	Pimps and Brothels/Prostitution/ Pornography	4	.4	.4	98.6
	Tax and Benefit Fraud	2	.2	.2	98.8
	VAT Fraud	11	1.2	1.2	100.0
	Total	916	97.8	100.0	
Missing	Not used	21	2.2		
Total		937	100.0		
Primary offence classification					
Valid	Drug dealing	715	76.3	77.8	77.8
	Other blue collar	58	6.2	6.3	84.1
	White collar	146	15.6	15.9	100.0
	Total	919	98.1	100.0	
Missing	Terrorism	1	.1		
	Not known	17	1.8		
	Total	18	1.9		
Total		937	100.0		

Source: JARD. Crime types are pulled directly from JARD, save for burglary/theft/handling/robbery *which is an amalgamation of* burglary/theft, handling, *and* robbery.

Table 5.19. Asset-Specific Subsample Financial Characteristics

	N	*Min.*	*Max.*	*Mean*	*Std. Deviation*	*Median*
Agreed benefit	937	£1	£9,434,309	£145,257	£687,124	£6,026
Order amount	937	£1	£2,465,132	£32,421	£135,806	£1,710
Judgment proof ratio	937	0.00	1.00	0.5437	0.3764	0.5481

Source: JARD.

So how did these offenders hold their assets? Table 5.20 (below) sets forth asset holding behaviour for the 937 offenders. Cash was held most frequently (held in 80.7 percent of the 937 records); followed by vehicles (20.9 percent); real estate (16.2 percent); and financial assets in bank/building society accounts (13.2 percent). Some asset types were held very infrequently; these included antiques (held in 0 percent of

the 937 records); financial assets in general insurance products (0.1 percent); art (0.2 percent); and businesses (0.2. percent). It's not clear if this is the case because of underlying asset-holding patterns, or because FIs didn't look for these things. A not unlikely scenario (and one supported by this author's experience with financial investigators) is that FIs may have looked for those assets most easily identified, then moved on (driven by resource constraints). There is no way to establish from these data whether or not (and to what extent) this might be the case, but it cannot be ruled out. From an economic standpoint, it makes sense to prevent crime to the point that the marginal benefit of doing so equals the marginal cost of doing so. This is not justification for only carrying out cursory investigations, however—not least because offenders as a group will very likely learn over time what FIs look for and what it harder to find, parking assets in the latter category.[81]

Other (a catch-all category) exhibits the highest mean value in the subsample (this for the bail security of one offender); followed by real estate; businesses; and other financial assets (which includes shares, bonds, etc.). Offenders' assets as a percentage of total asset value were held primarily in real estate (54.4 percent); followed by cash (21.2 percent); financial assets in banks/building societies (8.5 percent); other financial assets (6 percent); and vehicles (5.1 percent). This is not overwhelmingly surprising; real estate typically represents one of the largest purchases made by an individual or a household. Of course, while real estate is generally an appreciating asset, cash and vehicles—more than 26 percent of total asset value—are not (no interest is earned by cash buried in the garden or hidden under the bed). This may explain in some part (at least a small part) why the judgment proof ratio described in the earlier section is not closer to 1.00 (this, along with the various other factors noted in the judgment proof section, above). These findings also imply that at least nearly 60 percent of assets—held in real estate and vehicles—are held in somewhat illiquid fashion.

[81] Assuming that it may be too costly to thoroughly investigate each offender, and given that offenders learn where/how FIs search for assets, one solution might be to thoroughly investigate a random sample of offenders. This should provide at least some deterrence (particularly since investing abroad, for example, is likely to be more expensive for the offender). Thanks go to one of the early readers of the present chapter for suggesting this.

JARD captures very limited information on whether or not assets were hidden and/or held offshore. Unfortunately, this information is captured in a question with four answer options—cash, other, hidden, overseas—which are not mutually exclusive. For example, assets might be in the form of cash (one of the answer choices) which was actually hidden overseas (both hidden and overseas are themselves answer choices); and it's not clear at all what is meant by other. (This JARD field should be modified appropriately, given its potential importance as intelligence and for confiscation order enforcement.)[82]

Differences in asset holding behaviour in the subsample were explored for different classes of offenders (see Table 5.21 and Figure 5.6). Because of the virtual paucity of data, comparisons are made between primary offence classes (drug dealing, other blue collar, and white collar), not the primary offences themselves. Tests for statistical significance are not carried out on these speculative data. In general, mean asset values are higher for the white collar offences than for those in the drug dealing and other blue collar classes. This is most evident with cash, financial assets in banks/building societies, financial assets-other, other physical assets, and vehicles. Also, the share of asset value held in each asset type differs by primary offence class. For example, blue collar offenders hold more of their assets in real estate (74 percent) than drug dealing offenders (61 percent) and white collar offenders (47 percent); drug dealers and white collar offenders both hold 22 percent of their asset value in cash, while other blue collar offenders hold 11 percent in cash. The present data do not allow for detailed analyses of the drivers of differences in asset-holding behaviour. It seems reasonable to assume that patterns will change as net worth increases, and also

[82] This information is captured for each asset, so for the 1,878 assets described with the 937 records of interest here, what do we see? Again, this is only a preliminary finding, as answer options were not mutually exclusive. Forty-four assets (2.3 percent of the 1,878) were classified as overseas, representing 2,170,168 GBP (5.8 percent of the total asset value of 37,389,999 GBP). These included: five cash (65,518 GBP in total); 12 financial assets in banks/building societies (782,282 GBP in total); one financial asset-other (15,000 GBP in total); one other physical asset (60,000 in total); 16 real estate (1,111,430 GBP in total); and nine vehicles (135,938 GBP in total). Thirty-four assets (1.8 percent of the 1,878) were classified as hidden, representing 1,824,069 GBP (4.9 percent of the total asset value of 37,389,999 for the 937 records). These included: 16 cash (889,763 GBP in total); five financial assets in banks/building societies (158,498 GBP in total); one financial asset-life assurance (2,295 GBP in total); four financial asset-other (79,882 GBP in total); two jewellery (55,000 GBP in total); three real estate (594,907 GBP in total); and three vehicles (43,724 GBP in total). It seems hard to imagine that such small percentages of assets were parked offshore and/or hidden. This is suggestive of either FIs not looking (or not finding things), and/or not understanding the question.

because certain crime types may require certain assets (one would have thought that cash would be found on drug dealers more than other offenders).

Table 5.20. Asset-Holding Behaviour

	Records with asset	*% of all records (N=937)*	*Mean*	*Std. Deviation*	*Median*	*Sum*	*% of total value of assets*	*% of total value of assets (excluding cash)*
Antiques	0	0.0%	£0	£0	£0	£0	0.0%	0.0%
Art	2	0.2%	£13,388	£12,122	£13,388	£26,777	0.1%	0.1%
Business	2	0.2%	£90,506	£36,071	£90,506	£181,012	0.5%	0.6%
Cash	756	80.7%	£10,496	£47,224	£916	£7,934,923	21.2%	.
Financial assets-bank/building soc.	124	13.2%	£25,738	£121,785	£2,288	£3,191,474	8.5%	10.8%
Financial assets-general insurance products	1	0.1%	£1,209		£1,209	£1,209	0.0%	0.0%
Financial assets-life assurance products	8	0.9%	£24,527	£46,087	£8,903	£196,220	0.5%	0.7%
Financial assets-other	33	3.5%	£68,024	£187,258	£17,282	£2,244,805	6.0%	7.6%
Financial assets-pension products	7	0.7%	£4,267	£3,236	£3,313	£29,872	0.1%	0.1%
Jewellery	40	4.3%	£6,423	£14,956	£1,700	£256,925	0.7%	0.9%
Other	4	0.4%	£199,247	£397,169	£994	£796,989	2.1%	2.7%
Other physical assets	34	3.6%	£7,570	£16,862	£1,006	£257,385	0.7%	0.9%
Real estate	152	16.2%	£133,883	£151,123	£85,000	£20,350,202	54.4%	69.1%
Vehicles	196	20.9%	£9,797	£28,201	£3,395	£1,920,207	5.1%	6.5%

Source: JARD. Note that means, etc. only draw from those records with non-zero asset values, not all 937 records.

Table 5.21. Asset-Holding Behaviour by Primary Offence Class

	Drug dealing			*Other blue collar*			*White collar*		
	Mean	***Valid N***	***Sum***	***Mean***	***Valid N***	***Sum***	***Mean***	***Valid N***	***Sum***
Art	£21,960	1	£21,960	£4,817	1	£4,817	.	0	.
Business	£90,506	2	£181,012	.	0	.	.	0	.
Cash	£4,382	651	£2,852,641	£16,507	23	£379,659	£64,206	71	£4,558,644
Financial assets-bank/building soc.	£8,624	67	£577,832	£8,394	13	£109,116	£61,919	39	£2,414,849
Financial assets-general insurance products	£1,209	1	£1,209	.	0	.	.	0	.
Financial assets-life assurance products	£18,464	2	£36,928	£656	1	£656	£39,306	4	£157,223
Financial assets-other	£36,910	13	£479,834	£35,956	5	£179,780	£109,085	14	£1,527,190
Financial assets-pension products	£4,021	3	£12,062	£4,399	1	£4,399	£4,470	3	£13,410
Jewellery	£3,242	26	£84,280	£14,500	4	£58,000	£14,197	8	£113,574
Other	£1,000	1	£1,000	.	0	.	£265,330	3	£795,989
Other physical assets	£5,182	23	£119,186	£2,871	6	£17,226	£24,195	5	£120,973
Real estate	£137,801	56	£7,716,880	£110,754	24	£2,658,090	£141,627	68	£9,630,619
Vehicles	£6,936	120	£832,329	£8,687	19	£165,057	£17,775	51	£906,541

Source: JARD

Figure 5.6. Proportion of Value of Assets Held by Primary Offence Class

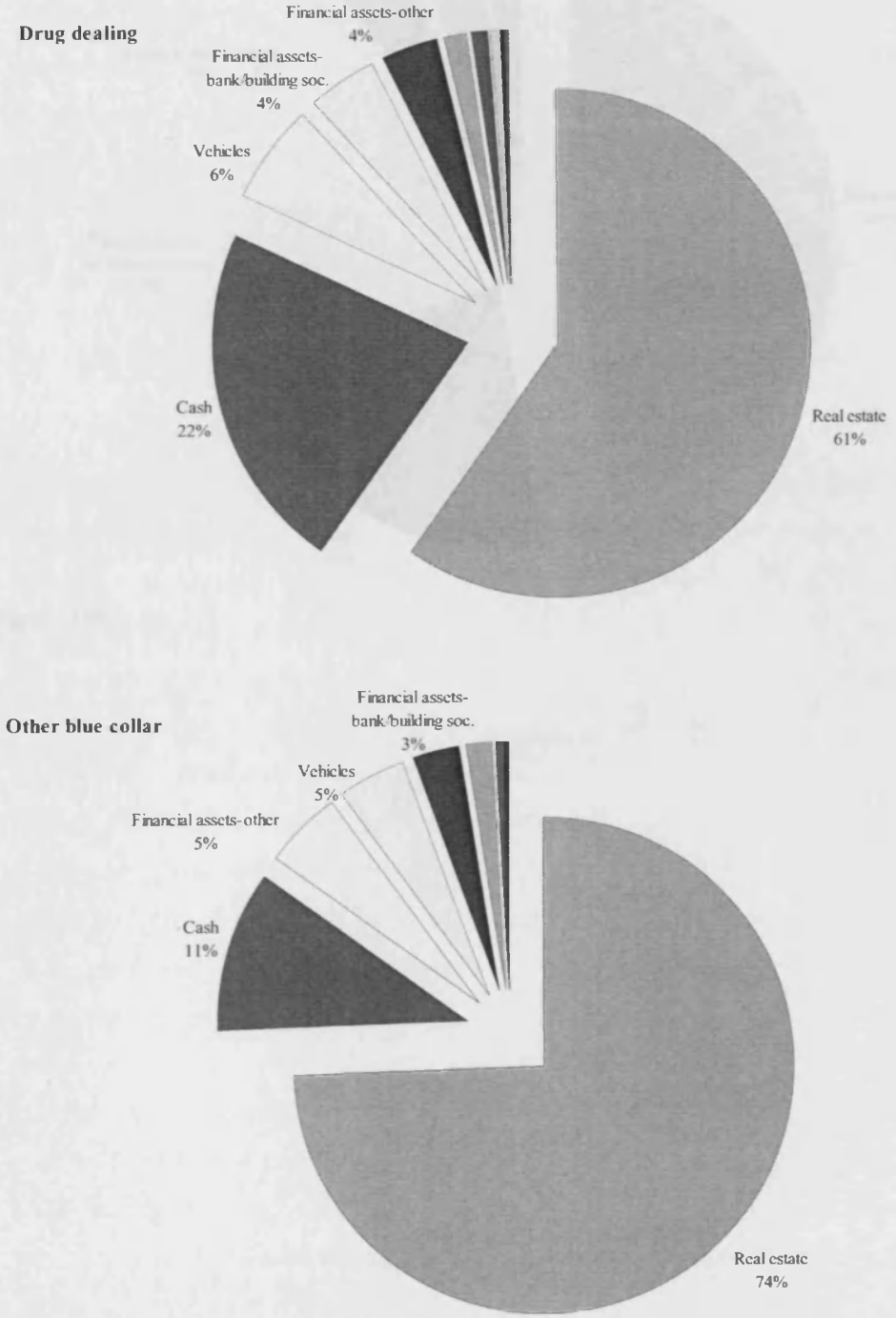
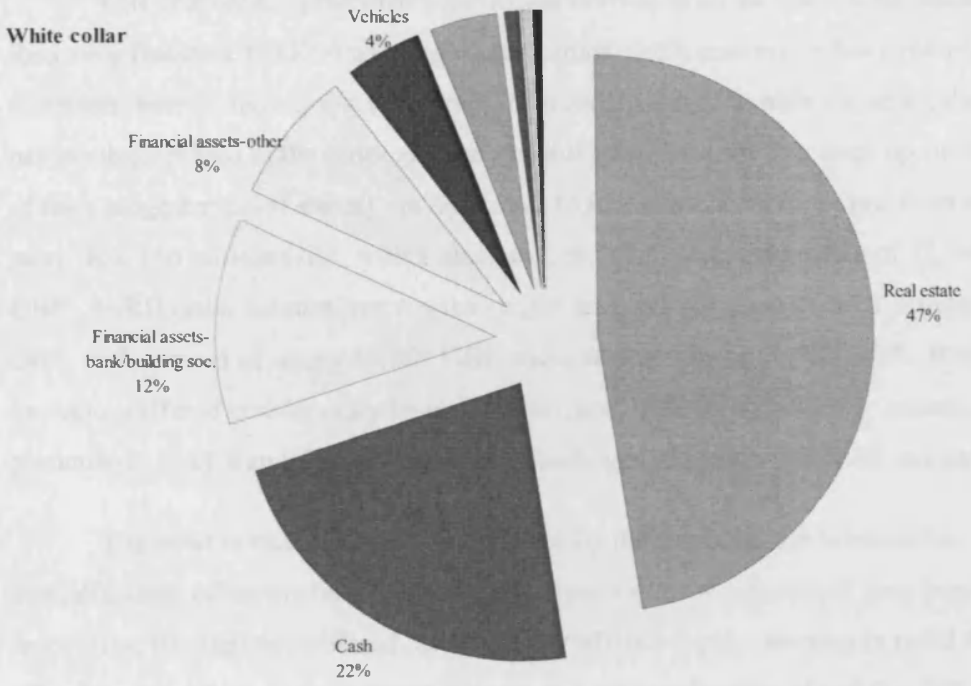


Figure 5.6. Proportion of Value of Assets Held by Primary Offence Class (continued)



Source: JARD.

5.4. Conclusion

This chapter has presented information derived from the UK's Joint Assets Recovery Database (JARD) with regard to criminal confiscations. It has explored offenders' benefit from crime (captured in the JARD agreed benefit variable); their net worth (captured in the order amount variable); and how the two stack up (in terms of their judgment proof status). In the event, JARD agreed benefit ranged from one to more than 156 million GBP, with a mean of 226,714 GBP and a median of 12, 388 GBP. JARD order amount (net worth) ranged from zero to more than 18 million GBP, with a mean of nearly 49,000 GBP and a median of some 1,938 GBP. Both variables differed considerably by primary offence, with the white collar crimes, particularly VAT fraud, leading the pack in both agreed benefit and order amount.

The most critical finding is that guided by the imperfect yet informative available data, offenders on average appear to save some 47 percent of their benefit from crime (though this differed, of course, by offence type). Bearing in mind that offenders are not likely to be arrested/convicted with probability of one (i.e. 100 percent of the time), then truly deterrent sanctions would need to be some multiple of the estimate of the criminal harm. But here we're seeing that rather than a multiple of criminal benefit (i.e. of agreed benefit), only a fraction is available for recovery. This tempers to some extent our faith in asset recovery's efficacy in deterring crime, though it is in no way suggestive of a complete inability to deter. For one thing, the finding reinforces the importance of asset recovery as a complement to, as opposed to substitute for, imprisonment: the two together may represent a sufficient deterrent, whereas the two in isolation might not. Moreover, no doubt asset recovery (and other monetary sanctions) should deter at least a subset of offenders (e.g. offenders whose crime type(s) carry a greater likelihood of arrest/conviction, thus requiring a smaller multiple of the criminal harm to deter; and/or offenders who carry out crime which meets the criteria for recovering the proceeds of general criminal conduct). What these findings also raise is the possibility that depending on the goals/targets of asset recovery, it may be most efficient for law enforcement to target particular crime types.

The chapter has also explored offenders' asset holding behaviour, though the data employed in the asset-holding analyses are of somewhat suboptimal quality. In

the subsample of JARD data used, offenders' assets as a percentage of total asset value were held primarily in real estate (54.4 percent); followed by cash (21.2 percent); financial assets in banks/building societies (8.5 percent); other financial assets (6 percent); and vehicles (5.1 percent).

There are most certainly calls for future research. The most obvious future research relates to the search for/use of better data. JARD data quality is low on a number of fronts. Given the importance of these data in driving policy, it seems reasonable to recommend that the data-entry process is streamlined and modified—perhaps by taking the role of JARD data entry clerk away from FIs and placing it in the capable hands of specific staff members with JARD-only responsibilities. In any case, better data are needed to confirm or refute findings in this, particularly those relating to asset-holding behaviour.

Offender financial behaviour presumably differs (perhaps through a causal relationship) in the presence of children and/or other dependents, with sufficient educational attainment, and/or with legitimate employment. But data on these characteristics don't exist, and/or are not of sufficient quality to be of use. Future research should seek to capture these data-points, along with the other relevant personal/criminal/financial characteristics. Better data along these lines would allow for explorations of the factors which drive certain types of criminal activity—and might suggest appropriate policy interventions to combat crime. And better data would allow for analyses of offence choice: if more money can be made with white collar crime, and drug dealing and other blue collar crime involves violence and its consequent risks, why are more offenders not forgoing such crime for the white collar frauds/etc.? What are the barriers to participation in white collar crime (or even simply are there barriers to participation in such crime?)?

Along these lines, the present data have not allowed for any serious analyses of flows, just stock variables (most notably with net worth). The data don't even allow for analyses of income (legitimate or otherwise, both flows) per unit time. Future analyses should look to capturing better data on flows, particularly on illicit and legitimate earnings per unit time—and subsequently comparing these data to findings related to legitimate income across the UK. Such analyses would help to illustrate whether or not offenders in general or those carrying out specific offences

might be earning more or less than their non-criminal counterparts. This also might go some way to understanding whether or not criminal activity is a substitute for or complement to legitimate employment—and would help to suggest the merit of crime-control policies based on improving offenders' employment opportunities.

This research has sought to explore the criminal benefit, net worth, judgment proof status, and specific asset-holding behaviour of acquisitive offenders. It has not sought to compare the financial characteristics of offenders to non-offenders (though see Prichard, 2007). Future research (particularly that drawing from better data) should look to the statistical and economic literature on income and wealth across the population to examine differences between offenders and their legitimate counterparts.

Lastly, future research might seek to involve the UK's Enforcement Task Force, which is responsible for enforcing outstanding confiscation orders, particularly those pre-POCA. What is it about these particular confiscation orders that makes them outstanding? Is it that offenders had insufficient funds to pay off the orders—were they judgment proof—or were the orders simply un-enforced and thus ignored (itself suggesting a dynamic component to the issue)? What have offenders done with their assets in the meantime?

Chapter 6. Regulated Sector Targeting of Suspicious Activity: Signal or Noise[83]

A suspicious activity report (SAR) is a piece of information which alerts law enforcement that certain customer activity—perhaps a series of large out-of-character deposits or the cash purchase of a high-value asset—is in some way suspicious and might indicate money laundering or terrorist financing (and thus criminal and/or terrorist activity). In the UK, SARs are sent by members of the regulated sector (e.g. banks and building societies, law firms, accounting firms) to the Serious Organised Crime Agency (SOCA) for processing, and are subsequently passed to law enforcement, including SOCA itself, via the online SARs database (known as Elmer) for action.[84] The SARs regime is designed to deter and displace money laundering and predicate offences; to facilitate the detection and sanctioning of such crimes after the fact; and to disrupt such crimes in progress (see, for example, KPMG, 2003; Reuter and Truman, 2004; Gold and Levi, 1994; HMT, 2004).[85]

While the very existence of the SARs regime likely deters some criminality, suspicious activity reporting clearly does not deter all offenders from offending. As such, the targeting accuracy of the regime is critical to its crime-reduction efficacy—and to the impact of asset recovery on crime (after all, if offenders can simply launder their criminal proceeds, then the state will have little luck in financial investigations, and will underestimate offenders' realisable amounts in confiscations—at the very least).[86] While it is difficult to ascertain with certainty regulated sector entities' accuracy in recognizing and reporting on suspicious activity, there are proxies for success. In this regard, hits (i.e. matches) on various law enforcement databases (e.g. Police National Computer, local force intelligence databases) and indeed Elmer itself may serve as indicators of accurate targeting.

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[83] The author wishes to thank the three cooperating police forces and NCIS SFI for their help with data provision. The Home Office is gratefully acknowledged for its contribution to research costs.

[84] SARs were originally sent to NCIS. In April 2006, NCIS became part of the UK's Serious Organised Crime Agency (SOCA).

[85] To these are often added "to protect the integrity of the financial system" and "to avoid economic and competitive distortions" (HMT, 2004).

[86] Moreover, while outside the scope of the present research, there is very likely a dynamic nature to the deterrent nature of the SARs regime, in that offenders may learn of the regime's inaccurate

(continued)

A limited data-collection exercise exploring external hits was carried out by the London Regional Asset Recovery Team (LRART) on behalf of this author as part of a larger study on the use and management of SARs by law enforcement agencies (LEAs) in the UK (Fleming, 2005). The present chapter replicates and expands on this previous work using a larger sample (of importance not least because the small LRART sample was from a crime-heavy London borough). The present chapter also explores the extent to which external database hits are associated with various internal SAR characteristics (e.g. frequency with which someone is previously reported upon; type/amount of transaction; reporting sector from which the SAR originates).

The chapter is structured as follows: a background section sets forth the issues; details of the data are provided; the findings are presented, along with any policy implications; and a conclusion section summarises and suggests directions for future research.

6.1. Background

The SARs regime is the primary component of the UK's anti-money laundering (AML) policy package. As noted above, the regime—and the AML package generally—is designed to prevent money laundering (and the predicate acquisitive crimes) and to sanction such activity after the fact. Indeed, the SARs regime is designed to prevent offenders from hiding the proceeds of crime, and in this regard is critical to the functioning of asset recovery as a crime-reduction policy. If offenders can easily squirrel away criminal proceeds, then the threat of confiscation is hollow (i.e. there is little or no deterrent effect).

As noted earlier, the crime-fighting success of the SARs regime is a function of three things: 1) offenders' ability to creatively hide assets from view (or at least to make otherwise suspicious activity seem legitimate); 2) the reporting sector's ability to spot suspicion when confronted with it; and 3) LEAs' ability to make efficient/effective use of the SARs provided by the reporting sector. The present chapter is concerned with the second of these, the reporting sector's ability to accurately target suspicious activity (i.e. to report signal, not noise).

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targeting over time (if that is the case), subsequently becoming less and less deterred as time

(continued)

The targeting accuracy subject has received little empirical treatment in the research community—largely because the quality of existing data has been poor. Gaining an understanding of the ability of the reporting sector to target suspicion requires systematic information on the use of SARs (including on the scenario on which the SAR was filed, whether or not the SAR was examined in any way by law enforcement, whether or not through investigation or hits on various indicative databases it appeared to relate to criminality, etc.). Herein lies the rub: very little systematic information exists on the use of SARs in crime reduction, a fact which has not escaped notice in previous studies (see, for example, Fleming, 2005; KPMG, 2003; Gold and Levi, 1994). Each study sought to indicate, using a variety of means—all hamstrung by the paucity of usable data/information on the subject—the relationship between SARs and various criminal justice outcomes, such as investigations, prosecutions, and convictions.[87] The present chapter expands on one such approach, that taken in Fleming (2005) to explore the incidence of external database hits as a proxy for targeting success. In that study, a sample of 200 nonconsent SARs all associated with a crime-heavy London borough (and all dating from 2004), was searched against three external databases. These databases included the MPS Crime Reporting Information System (CRIS), PNC, and the MPS Criminal Intelligence system (CRIMINT) Levels 1 and 2 (Level 2 represents a higher-level of possible criminality). Some 46.5 percent of the sample had hits on CRIMINT Level 1; 29.5 percent had hits on CRIMINT Level 2; 20.5 percent had hits on PNC; and 8.5 percent had hits on CRIS. The CRIMINT hit-rate is striking—not least because only exact names and addresses were searched, excluding aliases and fuzzy matches—and would suggest a degree of targeting accuracy.

6.2. Data

The analyses below are based on a sample of 1,196 SARs received by three police forces—one large urban and two smaller, more rural forces—between end-

progresses.

[87] This assumes a relationship between outcomes and efficacy, of course.

2005-beginning-2006.[88] While not strictly a random sample, the SARs were selected solely on the basis of timing (i.e. the fact that they were received during the November-February timeframe).[89] Note that Elmer, the SARs database, is available to LEAs nationwide in a remotely accessible, web-enabled online format. SARs are not strictly designated as appropriate for particular LEAs, so in truth the SARs were not "received" by the three police forces, but rather were pulled off the system because the post-codes of the individuals or companies described in the SARs fell within the force boundaries of the three forces. Table 6.1 presents the number of SARs from each force. Note also that while the SARs matched the force areas by postcode, upon closer inspection, certain of the SARs really fell to agencies like what is now Her Majesty's Revenue and Customs (HMRC) for action (perhaps because of some text in the reason for suspicion). These "misallocated" SARs were not included in the analyses. Excluding these, the sample contains some 839 SARs.

Table 6.1. Number of SARs Used in the Analyses by LEA

	Large urban LEA	*Smaller LEA 1*	*Smaller LEA 2*	*Total*
Original sample	400	152	644	1,196
"Misallocated"	25	43	289	357
Percent "misallocated"	6.3%	28.3%	44.9%	29.8%
Used in the subsequent analyses	375	109	355	839

Source: Participating LEAs. Note that one of the smaller LEAs conducted the research over a longer period of time, thereby capturing a larger subsample of SARs. The large urban LEA was ultimately unable to provide the level of assistance promised ex ante, with a resulting smaller subsample of SARs. Note also that the large urban LEA interpreted the misallocated concept to mean simply those SARs which despite a postcode match to the force area really belonged to a neighbouring force (but those SARs which might be more the province of Her Majesty's Revenue and Customs or Department for Work and Pensions were not *excluded from the analyses).*

The 839 SARs in the sample were checked one-by-one against the Police National Computer (PNC) and force intelligence system (or systems) for the three forces involved; matches (i.e. "hits") between each SAR and the databases were recorded. PNC contains information on convicted offenders. Force intelligence systems typically contain information on suspected crimes, criminals, and other items

[88] The present sample was smaller than anticipated when the research was launched. This is because one of the police forces (the large urban LEA) was ultimately unable to provide the level of assistance originally promised *ex ante*.

[89] There may be a seasonal component in the filing of SARs by reporting entities, though no research exists on the subject.

of police interest (including victims of crime). Matches were generally based on names, though addresses were sometimes used for the force intelligence searches. Fuzzy search capabilities were broadly not employed (though one force noted that fuzzy search capabilities did play a small part in force intelligence matching). Information was also provided by the three participating forces on previous SARs: participants indicated whether or not (and how many) previous SARs had been received on the same individual or company which had been filed by the same reporting entity, and also whether or not/how many previous SARs had been filed by different reporting entities. And the three forces indicated whether or not the reason for suspicion (an open-ended text field of each SAR) suggested on its own that true criminal activity was behind the filing of the SAR. Lastly, police data were complemented by information from NCIS. This information included the reporting sector (e.g. bank, lawyer, accountant) and transaction amount (if any) in GBP of the suspicious activity for each SAR in the sample.

Note that the data-collection methodology employed by the three police forces—manually checking SARs one-by-one against various databases and Elmer itself—is almost certainly not the most efficient or effective means of leveraging SARs in the fight against crime. The author is grateful to the three forces for accommodating this one-by-one data request. The most efficient and effective use of SARs very likely draws on the ability of SARs to indicate criminal networks and highly active criminals. The one-by-one method is commonly used, however (Fleming, 2005); this should change with the introduction of national minimum work standards or some similar form of guidance to LEAs, and with the introduction of more advanced analytical tools. The publication of the Lander Review of the SARs Regime in April 2006 noted that SOCA plans on investing heavily in analytical tools (though this doesn't appear to have happened yet).

The 839 SARs were originally filed by a range of reporting entities, with 75 percent emanating from banks/building societies; 3.9 percent from accountants; and 3.7 percent from the legal profession (see Table 6.2). Like all SARs, these 839 were the result of manual and automated procedures for identifying suspicious activity. SARs resulting from manual procedures will have been generated by counter-staff and other customer-facing employees who will have determined, for whatever

reason(s), that the customer activity seemed in some way suspicious. Back-office staff may also have uncovered suspicions in the course of their daily business. Training programs for employees will have helped all staff to get a sense of the legislative requirements and entity-specific policies/procedures for the reporting of suspicious activity. Automated transaction-monitoring systems will also have triggered the filing of SARs. Such systems are commonly used in larger financial services firms (particularly banks/building societies) to flag up anomalous behaviour. Importantly, some filtering occurs in the process: reporting entities will often review SARs prior to submitting them to NCIS/SOCA, and those outwardly innocent (e.g. SARs which are the product of automated transaction monitoring, but perhaps which represent an as yet un-tweaked and overzealous system) are dropped. The results of such filtering in terms of targeting have not been studied (here or elsewhere), and obviously some filtering may drop SARs representing signal whilst keeping some representing noise.

Table 6.2. Reporting Sector for the SARs in the Sample

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	Accountant	33	3.9	3.9	3.9
	Bank	536	63.9	63.9	67.8
	Building society	93	11.1	11.1	78.9
	Legal profession	31	3.7	3.7	82.6
	Other	146	17.4	17.4	100.0
	Total	839	100.0	100.0	

Source: Participating LEAs; NCIS.

6.3. Findings

So do the SARs filed by reporting entities more closely resemble signal, or rather noise? And are there any relationships between the signal and various SAR characteristics (in terms of database hits)? This section gets to the heart of the matter (or at least as far as possible with proxies). It begins with a discussion of the hits (i.e. matches) in the sample against external databases, namely PNC and force intelligence. In the event, hits against these databases are assumed to be proxies for successful targeting of suspicion. Obviously, these are not ideal indicators. For one thing, not all hits will confirm that true criminal activity was indeed behind the suspicion. No information was provided by the forces on the seriousness/significance

of the hits (that is, forces were not asked to do describe each hit, as this would have implied a much greater drain on resources to conduct the research). Many hits may have resulted from motoring offences, for example, that any number of otherwise innocent people may have committed (though perhaps otherwise minor criminal behaviour might indicate a broader pattern of serious criminality). Further, some hits may have resulted from links to databases not as offenders but as victims, or simply because of address matches. And, of course, one or more SARs with no outward links to sources of information like PNC and force intelligence may indeed refer to criminal activity—so the "noise" may not be noise at all. One theoretical benefit of SARs is their ability to alert the authorities to previously unknown criminality (including that relating to previously unknown criminals). The analysis of the reason for suspicion (below) has sought to explore the potential for this to happen. But no perfect indicators exist, and as proxies these should go some way to indicating targeting accuracy or lack thereof.

Some 20.7 percent of the sample had hits on PNC, and 27.4 percent had hits on the respective force intelligence system (see Table 6.3).[90] Note that 66 SARs were deemed unsearchable on PNC by one force because they contained no date of birth and/or represented a corporate entity. Further, one of the smaller forces noted that a small, unspecified number of hits on the force intelligence system could be the result of the force's practice of logging the existence of previous SARs on the same subject onto the intelligence system. So the rate of force intelligence hits may contain minor double counting.

In any case, if hits on either PNC or force intelligence are considered indicative of overall targeting success, then some 35.6 percent of the sample represents signal, not noise (that is, this 35.6 percent had a hit on either or both PNC and force intelligence). This rises to 36.9 percent when ignoring the 66 SARs considered by one force to be unsearchable on PNC; of this 36.9 percent, 11.8 percent had hits on both PNC and force intelligence. Though there is no set percentage which

[90] One of the two smaller forces conducted searches on a second intelligence system, this for the work of the financial investigation unit (FIU). The findings are not usable, however, as hits arise consistently (not just occasionally) because previous SARs have been logged onto this FIU intelligence system.

indicates solid performance on SARs targeting, having more than one-third of the sample with hits on police systems seems impressive. After all, these checks represent nothing more than simple data-matching, not advanced analytics (so even if slight double counting exists for one force, this still seems notable).[91]

Table 6.3. Hits on PNC and Force Intelligence

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
PNC					
Valid	No hit	613	73.1	79.3	79.3
	Hit	160	19.1	20.7	100.0
	Total	773	92.1	100.0	
Missing	No DoB	38	4.5		
	Company	28	3.3		
	Total	66	7.9		
Total		839	100.0		
Force intelligence					
Valid	No hit	609	72.6	72.6	72.6
	Hit	230	27.4	27.4	100.0
	Total	839	100.0	100.0	
Signal: PNC or force intelligence hit (signal)					
Valid	No hits	540	64.4	64.4	64.4
	One or more hits	299	35.6	35.6	100.0
	Total	839	100.0	100.0	
Signal: PNC or force intelligence hit (excluding the 66 SARs for which no PNC was possible)					
Valid	No hits	488	58.2	63.1	63.1
	Hits on one of the two	194	23.1	25.1	88.2
	Hits on both	91	10.8	11.8	100.0
	Total	773	92.1	100.0	
Missing	No DoB or company	66	7.9		
Total		839	100.0		

Source: Participating LEAs.

As noted above, the participating forces also read each SAR's reason for suspicion to see whether or not the text suggested on its own that the SAR was linked to criminality. While this gets squarely into the realm of subjectivity, the data imply that 34.6 percent of the SARs seemed to be suggestive of criminality (see Table 6.4). If, as above, hits on either PNC or force intelligence—or, now, a strongly suggestive

[91] Of course, while perhaps indicative of the fact that banks and others are finding more signal than noise, that these reporting entities are finding individuals *already known* in some way to law enforcement might also call into question the value-add of SARs.

reason for suspicion—are indicative of overall targeting success, then some 56.7 percent of the sample represents signal as opposed to noise. This rises to 57.7 percent when ignoring the 66 SARs considered by one force to be unsearchable on PNC; of this 57.7 percent, 14 percent had hits on two of the three indicators (PNC, force intelligence, and reason for suspicion); and 6.2 percent had hits on all three. That more than 56 percent of the sample appears to resemble signal is striking. This figure should be interpreted cautiously, however, due to the subjectivity of the understanding of the reason for suspicion absent further criminal investigation; participants in the data collection may have used an inappropriately low bar for deciding that the reason for suspicion was linked to criminality.

Table 6.4. Reason for Suspicion

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Reason for suspicion suggests criminality					
Valid	No	549	65.4	65.4	65.4
	Yes	290	34.6	34.6	100.0
	Total	839	100.0	100.0	
Signal: PNC or force intelligence hit or suggestive reason for suspicion (signal)					
Valid	No hits	363	43.3	43.3	43.3
	One or more hits	476	56.7	56.7	100.0
	Total	839	100.0	100.0	
Signal: PNC or force intelligence hit or suggestive reason (excluding the 66 SARs without PNC)					
Valid	No hits	327	39.0	42.3	42.3
	Hits on one of the three	290	34.6	37.5	79.8
	Hits on two of the three	108	12.9	14.0	93.8
	Hits on all three	48	5.7	6.2	100.0
	Total	773	92.1	100.0	
Missing	No DoB or company	66	7.9		
Total		839	100.0		

Source: Participating LEAs.

The 839 SARs were checked against Elmer for the presence of previous SARs. Nearly 39 percent (325 of the 839) appeared to be "first-time" SARs, while 61.3 percent (514 of the 839) were related to previous SARs (see Table 6.5). Some 49.7 percent (417 SARs) related to previous SARs from the same reporting entity; 13.2 percent (111 SARs) related to previous SARs from different reporting entities. There was overlap between the two; 1.7 percent of the sample had previous SARs from both the same and different reporting entities (not shown in the table).

Participating forces also provided the number of previous SARs linked to each of the SARs in the sample, ranging from zero to 60 SARs from the same reporter, and from zero to 139 SARs from a different reporter.

Table 6.5. Previous SARs

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Overall					
Valid	First-time SARs	325	38.7	38.7	38.7
	Relating to previous SARs	514	61.3	61.3	100.0
	Total	839	100.0	100.0	
Previous SARs from* same *reporting entity					
	No previous SARs from same reporter	422	50.3	50.3	50.3
	One or more previous SARs from same reporter	417	49.7	49.7	100.0
	Total	839	100.0	100.0	
Previous SARs from* different *reporting entity					
	No previous SARs from different reporter	728	86.8	86.8	86.8
	One or more previous SARs from different reporter	111	13.2	13.2	100.0
	Total	839	100.0	100.0	

Source: Participating LEAs.

Table 6.6. Number of Previous SARs Linked to Each SAR in the Sample

	N (SARs)	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*	*Median*
Previous SARs, same reporter	839	0	60	1.05	3.359	.00
Previous SARs, different reporter	839	0	139	.99	6.957	.00

Source: Participating LEAs.

SARs often contain information on transaction amounts, of course. In fact, one SAR may often contain information on numerous suspect transactions (a course of suspicious activity). Some 524 of the 839 SARs in the sample (62.5 percent)

contained information on amounts (not all SARs include information on amounts).[92] Suspicious amounts were aggregated for each SAR; these ranged from 0 GBP to 13,200,000 GBP. The 13 million GBP figure is an outlier; the next highest amount is some 990,673 GBP. Excluding the large outlier, the mean and median amounts are 36,189 GBP and 10,000 GBP, respectively (see Table 6.7).

Table 6.7. SAR Amounts

N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*	*Median*
523	0	990,673	36,189	85,974	10,000

Source: Participating LEAs; NCIS. An outlier of 13,200,000 GBP was excluded.

To this point, the analysis has set forth the characteristics of the sample, information which is indicative of, among other things, accuracy in SARs targeting. But what of relationships between SARs characteristics and targeting accuracy? These are discussed below.

Table 6.8 explores differences in the percentage of SARs with hits on the various systems/indicators by characteristics including LEA, reporting sector, and whether or not previous SARs had been filed. Differences by LEA in the percentage of SARs with hits or with a suggestive reason for suspicion are likely due to the vagaries of the data, differences in interpretation of the subjective reason for suspicion test, and perhaps to different systems (as the depth/coverage of force intelligence systems varies between forces).[93] We would expect to see differences in hit rates by reporting sector—and we do. After all, different financial services are provided by the various sectors, and the proximity of reporting entities to potential criminal action likely varies by sector as well. Lastly, previous SARs are commonly thought by law enforcement to be indicative of criminality, and if our proxies are correct, we might have expected ex ante to see SARs which related to previous SARs having higher hit rates. This is not the case with the present data: hit rates appear higher for most hit types for those SARs which are "first-time" SARs.

[92] Differences in means and nonparametric tests reveal no differences in PNC and force intelligence hit rates for those SARs with transaction amounts and those without.

[93] These differences may also be down to differing rates of crime. This was not explored.

Table 6.8. Percentage of SARs with Hits on PNC, Force Intelligence, and a Suggestive Reason for Suspicion

	Percentage with hits/suggestive reason for suspicion				
	PNC	*Force intelligence*	*Signal (either PNC or force intelligence)*	*Reason for suspicion*	*Signal with reason for suspicion*
By LEA					
Large urban	16.8%	21.9%	30.4%	20.5%	46.4%
Smaller 1	29.4%	19.3%	33.9%	18.3%	46.8%
Smaller 2	21.4%	35.8%	41.7%	54.4%	70.7%
Total	20.7%	27.4%	35.6%	34.6%	56.7%
By reporting sector					
Accountant	13.3%	9.1%	18.2%	57.6%	57.6%
Bank	20.9%	25.4%	34.9%	31.5%	54.5%
Building society	21.7%	33.3%	39.8%	28.0%	59.1%
Legal profession	19.4%	51.6%	58.1%	61.3%	80.6%
Other	21.1%	30.1%	34.9%	39.0%	58.2%
Total	20.7%	27.4%	35.6%	34.6%	56.7%
By with previous SARs					
No previous SARs	21.8%	33.2%	40.9%	40.3%	62.5%
With previous SARs	19.9%	23.7%	32.3%	30.9%	53.1%
Total	20.7%	27.4%	35.6%	34.6%	56.7%

Source: Participating LEAs; NCIS. Between-group differences in means (due to the manner in which the data were coded, means represent the percentage of SARs with hits) are significant for all of the LEA comparisons; for all of the reporting sector comparisons save for that of PNC *and* signal with reason for suspicion*; and for all previous SARs comparisons save for* PNC.

Table 6.9 presents mean and median SAR amounts by whether or not there hits on PNC and/or force intelligence, a suggestive reason for suspicion, and previous SARs. We might expect to see lower amounts in SARs truly related to crime as offenders seek to keep transactions psychologically below some perceived threshold (though what this would be remains unclear), in a failed attempt to fly below the radar. Lower amounts are in fact associated with hits on PNC/etc., but nearly all differences in means are not statistically significant. This is likely the case in part because some reporters file SARs which contain aggregated reports of several/many transactions, while others will file SARs which relate to individual transactions. That is, the patterns, if any exist, may be getting lost in the manner in which SARs are filed. Further, for some things, it may be the course of activity that is suspicious, while for others it may be one-off transactions that trigger suspicion. These may or may not be related to amounts.

Table 6.9. Mean and Median SAR Amounts by Hits on Systems and Previous SARs

	SAR amount			
	Mean (£)	***N (SARs)***	***Std. Dev. (£)***	***Median (£)***
PNC				
No hit	£40,071.66	378	94,618.201	10,878.00
Hit	£27,798.81	110	62,633.697	8,120.00
Total	£37,305.24	488	88,514.669	10,340.00
Force intelligence				
No hit	38,066.61	373	93,181.535	9,644.00
Hit	31,521.56	150	64,701.320	11,505.50
Total	36,189.44	523	85,973.539	10,000.00
Signal (either PNC or force intelligence)				
No hits	39,098.21	331	96,586.994	9,527.00
One or more hits	31,174.84	192	63,580.855	11,600.00
Total	36,189.44	523	85,973.539	10,000.00
Suggestive reason for suspicion				
No	30,231.92	349	60,806.691	10,940.00
Yes	48,138.73	174	121,035.783	8,103.00
Total	36,189.44	523	85,973.539	10,000.00
Signal with reason for suspicion				
No hits	30,919.92	226	63,323.969	10,302.50
One or more hits	40,199.25	297	99,747.191	10,000.00
Total	36,189.44	523	85,973.539	10,000.00
By previous SARs				
No previous SARs	40,305.00	210	105,457.642	8,076.50
Previous SARs	33,428.21	313	69,982.566	11,000.00
Total	36,189.44	523	85,973.539	10,000.00

Source: Participating LEAs; NCIS. Between-group differences in means are only significant for suggestive reason for suspicion *($p<0.05$). No differences are significant with the Kruskal-Wallis and median tests.*

Table 6.10 presents correlations between the variables of interest. It seems reasonable to assume that hits on PNC, force intelligence, and a suggestive reason for suspicion might all be associated in some way. All are indicators in their own right of criminal activity, or at least a past history of criminal activity. That said, each captures a slightly different concept (and to a different depth), and the overlap between them amongst criminals might not be perfect. For example, PNC contains information on convicted criminals, who might turn away from crime, or who might learn how to be better criminals (either way resulting in lower hit rates, though they might also be known to force intelligence). In the event, most of the action is with

force intelligence, which is positively correlated with PNC (correlation coefficient of 0.329, $p<0.01$); with a suggestive reason for suspicion (correlation coefficient of 0.093, $p<0.01$); and with previous SARs from a different reporting entity (correlation coefficient of 0.077, $p<0.05$); and negatively correlated with previous SARs from the same reporting entity (correlation coefficient of -0.140, $p<0.01$). The strength of association is not overwhelming, even for force intelligence with PNC, however.

Given that offenders will want to avoid the gaze of law enforcement, it seems safe to assume that they might seek to avoid the gaze of the regulated sector as well. To do so, we might expect offenders serious about money laundering to spread their laundering activity across a range of different reporting entities, rather than using only one entity.[94] This is supported by the data: having previous SARs from the same reporter is negatively correlated with having previous SARs from a different reporter (correlation coefficient of -0.264, $p<0.01$). Though the association is not terribly strong, this suggests that the more previous SARs we see from the same entity, the fewer SARs we're likely to see from different previous reporting entities. Unfortunately, no specifics were gathered on whether or not the previous SARs from different reporting entities were themselves from one other reporting entity, or rather a multitude of entities (when there were multiple such previous SARs).

Lastly, correlations between SAR amounts are neither significant nor strong for any of the variables, save for PNC and previous SARs from different reporters (both significant at the $p<0.05$ level, though neither correlation is strong). As noted above, it is possible to read too much into findings related to SAR amounts, as there are several reasons why they may not be too telling, at least in the manner in which they exist in the data.

[94] Though this is probably only the case for launderers who have no sufficiently believable reason for their activity

Table 6.10. Nonparametric Correlations (Spearman's rho) Between Variables of Interest

		PNC	Force intelligence	Reason suggests	Previous SARs, same reporter	Previous SARs, different reporter	SAR amount
PNC	Correlation Coefficient	1	.329(**)	0.055	-0.04	0.048	-.089(*)
	Sig. (2-tailed)	.	0	0.124	0.264	0.183	0.05
	N	773	773	773	773	773	488
Force intelligence	Correlation Coefficient	.329(**)	1	.093(**)	-.140(**)	.077(*)	-0.004
	Sig. (2-tailed)	0	.	0.007	0	0.025	0.924
	N	773	839	839	839	839	523
Reason suggests	Correlation Coefficient	0.055	.093(**)	1	-.070(*)	0.016	-0.052
	Sig. (2-tailed)	0.124	0.007	.	0.042	0.641	0.234
	N	773	839	839	839	839	523
Prev. SARs, same reporter	Correlation Coefficient	-0.04	-.140(**)	-.070(*)	1	-.264(**)	0.035
	Sig. (2-tailed)	0.264	0	0.042	.	0	0.421
	N	773	839	839	839	839	523
Prev. SARs, diff. reporter	Correlation Coefficient	0.048	.077(*)	0.016	-.264(**)	1	.099(*)
	Sig. (2-tailed)	0.183	0.025	0.641	0	.	0.023
	N	773	839	839	839	839	523
SAR amount	Correlation Coefficient	-.089(*)	-0.004	-0.052	0.035	.099(*)	1
	Sig. (2-tailed)	0.05	0.924	0.234	0.421	0.023	.
	N	488	523	523	523	523	523

*Source: Participating forces; NCIS. Note: **Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).*

6.4. Conclusion

This chapter has presented an analysis of regulated sector entities' accuracy in recognizing and reporting on suspicious activity, using hits on various law enforcement databases as proxies for success. The chapter also explored the extent to which external database hits were associated with various internal SAR characteristics. Most notably, some 20.7 percent of a sample of SARs provided by three police forces had hits on PNC, and 27.4 percent had hits on the respective force intelligence system. If hits on either PNC or force intelligence are considered indicative of overall targeting success, then some 35.6 percent of the sample represents signal, not noise. Though there is no clear hit rate which defines success, this may be suggestive of moderate-to-solid performance in targeting on the part of the regulated sector. After all, these checks represent nothing more than simple data-matching, not advanced analytics; it is reasonable to assume that more advanced work would reveal higher success rates, at least using these proxies for targeting accuracy (i.e. the "noise" may not be noise at all). Of course, these findings may be more indicative of the fact that some SAR filers appear to find and report signal—because their systems and staff see only that activity which is *very* obviously suspicious (note Levi and Maguire (2004): "most...identified laundering is fairly basic").

Taking the more optimistic view (i.e. that we're seeing OK targeting performance on the part of SAR filers), it may be the case that there is some potential for the SARs regime to affect the criminality of those offenders undeterred by its very existence. Of course, this depends on the ability of law enforcement to turn the financial intelligence provided by SAR filers into appropriate action (explored in the next chapter)—which, without seeking to ruin the suspense, does not appear to be the case. And we cannot escape from the fact that even if SAR filers are reporting signal, not noise, that signal may represent the activity of the criminals who aren't very talented (i.e. the amateur offenders), who, it seems reasonable to posit, may not represent those most harmful offenders of greatest interest to society.

As with all such studies, there are calls for future research. Another proxy for targeting accuracy might approach the issue from another angle. A random sample of convictions could be checked against the Elmer database to see whether or not SARs had been filed against the convicted offenders (and whether or not hit rates differed by

crime type). These findings might then serve to bolster (or not) the findings of the present chapter. As it happens, the Joint Assets Recovery Database (JARD), which records all confiscation orders and cash seizures/forfeitures in the UK, has been modified to capture similar information (namely whether one or more SARs had been filed on the offender in question). Assuming this field is used by FIs—which is not necessarily going to be the case, sadly, given how FIs have failed to fully embrace JARD—just such an analysis could be conducted quite easily in the coming months.

Reporting entities filter their internal alerts (which are generated by staff and automated transaction monitoring systems), such that fewer SARs are sent than internal alerts generated. Filtering occurs in an environment in which it seems that "there are probably too many alerts, and these can't all be truly suspicious"—but this unspoken assertion has not been tested in any capacity. Future research should examine those alerts which never become SARs (compared to alerts which are indeed filed) to explore the extent to which the filtering process may represent a misguided disposal of signal, not noise—with implications for the impact of the SARs regime on the undeterred.

But perhaps the most interesting question—though one which may go unanswered due to civil liberties constraints—is whether or not reporting entities would have a greater likelihood of finding truly suspicious activity by simply filing SARs on a random sample of their customer base. It seems unlikely that this would be the case, but certainly some customers with links to criminality will be flagged up with random selection—so the question becomes what is the marginal benefit of looking for suspicious activity over simple random selection. Then it would be possible to begin to consider the marginal benefits and costs of a SARs regime over and above an undoubtedly lower cost random regime.

Chapter 7. Law Enforcement Agency Use of SARs[95]

As noted, SARs alert law enforcement that certain customer activity is in some way suspicious and might indicate money laundering or terrorist financing (and thus criminal and/or terrorist activity. The SARs regime, which has been in place since legislation was introduced in 1986, has undergone significant legislative modification: the Proceeds of Crime Act 2002 (POCA) and the Money Laundering Regulations 2003 redefined the offence of money laundering and captured a broader range of activity within the business of the regulated sector. The number of reports received has grown considerably in the past several years; some 56,000 were received in 2002, nearly 95,000 in 2003, and more than 154,000 in 2004. Regulated sector compliance with the regime is mandatory.

But the extent to which SARs are actually used by law enforcement (and the value of SARs to law enforcement) has not been entirely clear. A July 2003 KPMG report commissioned by NCIS revealed significant shortcomings with the regime and suggested 21 recommendations to carry it forward. While many recommendations have been taken on board by appropriate agencies, unease with reporting requirements has been registered by the regulated sector, primarily because law enforcement agencies (LEAs) continue to have poor management information on how SARs are actually used. A mid-2004 position piece of the Association of Chief Police Officers of England, Wales, and Northern Ireland (ACPO) put it this way: "As the requirements of POCA come into force in respect of Suspicious Activity Reporting, there is increasing concern from those industry sectors required to report, that the reports are not actioned by police and other law enforcement agencies, such that they question the need for the requirement as it currently stands...they seek some reassurance from law enforcement on the use of the information they are providing" (Aldridge, 2004).

This chapter presents an examination of the use and management of SARs by LEAs in the UK.[96] It is structured as follows: after this introduction, a background

[95] Much of this chapter appeared in Fleming (2005). The author wishes to thank ACPO and the Home Office for research support in that endeavor. This chapter focuses on the state of affairs prior to June 2005—though the thrust of the findings—that SARs are vastly underutilized by law enforcement remains valid.

section presents an overview of the regime, the scope of the problem, and the methodology of the research; the theoretical underpinnings of SARs are discussed, including their role in crime reduction in the context of intelligence; the findings are presented; and a conclusion brings things to a close.

7.1. Background

7.1.1. SARs from Disclosure to LEAs: An Overview[97]

As set forth in POCA, SARs are filed by entities in the regulated sector when they have knowledge or suspicion of money laundering activity (or have reasonable grounds to know or suspect such activity).[98] Money laundering activity is set forth in Sections 327, 328, and 329 of POCA; it includes the concealing, arranging, and acquisition (acquisition, use, and possession) of criminal property. The regulated sector includes banks/building societies, accountants, lawyers, estate agents, casinos, money service bureaux, and dealers in high-value goods. Failure by a regulated sector entity to disclose suspected money laundering activity (through a SAR) of which it is aware is itself a crime. A SAR captures information which includes subject details (i.e. information regarding the subject(s) of the disclosure, be it an individual or legal entity), transaction details with account information, and the reason for disclosure (i.e. for suspicion). SARs are also filed to secure law enforcement consent on future activity which may constitute a prohibited act (e.g. the transfer of funds suspected of being criminal property). Of the 154,536 SARs received by NCIS in 2004, nearly ten percent were consent SARs (this chapter will refer to nonconsent

[96] Note that the concept of law enforcement used in this chapter is a broad one, and includes the law enforcement arms of various non-police organisations (e.g. Department of Work and Pensions). Note also that Her Majesty's Customs and Excise (HMCE) and Inland Revenue (IR) became Her Majesty's Revenue and Customs (HMRC) on 18 April 2005. This research refers to HMCE and IR as separate entities as appropriate (e.g. with historical uses of SARs). Similarly, NCIS and other agencies were combined to create SOCA in April 2006; NCIS is referred to throughout this chapter, as the organisation existed at the time the research was conducted.

[97] Much has been written on the regime over the years. For historical perspectives and process-related information, see, for example, KPMG (2003), PIU (2000), and/or Gold and Levi (1994), though because of the rate of change, even KPMG is to some extent dated. HMT (2004) provides a broad summary of the UK's AML strategy. The Joint Money Laundering Steering Group (JMLSG) *Guidance Notes* provide a comprehensive summary of the regime, though with an industry focus.

[98] SARs are distinct from the threshold-based reports employed in a number of overseas jurisdictions. The term *SAR* is not used in POCA. POCA requires businesses in the regulated sector to make a disclosure; this disclosure is commonly known as a SAR.

and consent SARs throughout). Banks/building societies file more than 75 percent of nonconsent SARs; the legal profession accounts for more than 80 percent of consent SARs, though this will likely fall with the Bowman v. Fels judgment.[99] See Figures 7.1 and 7.2, below, for information on receipts of SARs by NCIS.

As noted in the previous chapter, SARs are filed as a result of suspicions generated by regulated entity staff (e.g. clerks, back office staff) and automated transaction monitoring systems. Not all suspicions are ultimately reported: most alerts internal to regulated sector entities are examined and filtered prior to sending to NCIS. No research has yet examined this filtering process, and it is most certainly likely that filtering is imperfect (such that SARs ultimately representing criminal activity may be dropped as noise).

SARs are sent electronically (via internet or fax) or in hard copy to NCIS.[100] Once received, SARs are input into Elmer, the SARs database, and may undergo cursory analysis (analysis of individual SARs has evolved over time).[101] But while NCIS may develop intelligence packages and products, it does not itself make arrests. As such, SARs and other forms of criminal intelligence, not discussed here, are sent from NCIS to LEAs for action. Note that an important distinction is drawn for the purposes of this chapter between the words allocate and disseminate: SARs are automatically allocated (i.e. assigned) to an appropriate LEA by the Elmer system; SARs are disseminated when they are actually sent to LEAs for action. All SARs are allocated, but not all SARs are disseminated, at least at present. The manner in which SARs are disseminated to LEAs (including what has been done to those SARs sent,

[99] According to the Law Society, the Bowman v. Fels ruling "makes clear that legal professional privilege places solicitors under a primary duty to the court and their client, exempting them from making money laundering reports when acting in litigation" (Law Society, 2005). The decision had no impact on professional privilege (or lack thereof, as it happens) for accountants, auditors, and tax advisors. For more on the impact of this decision, see Fisher, 2006.

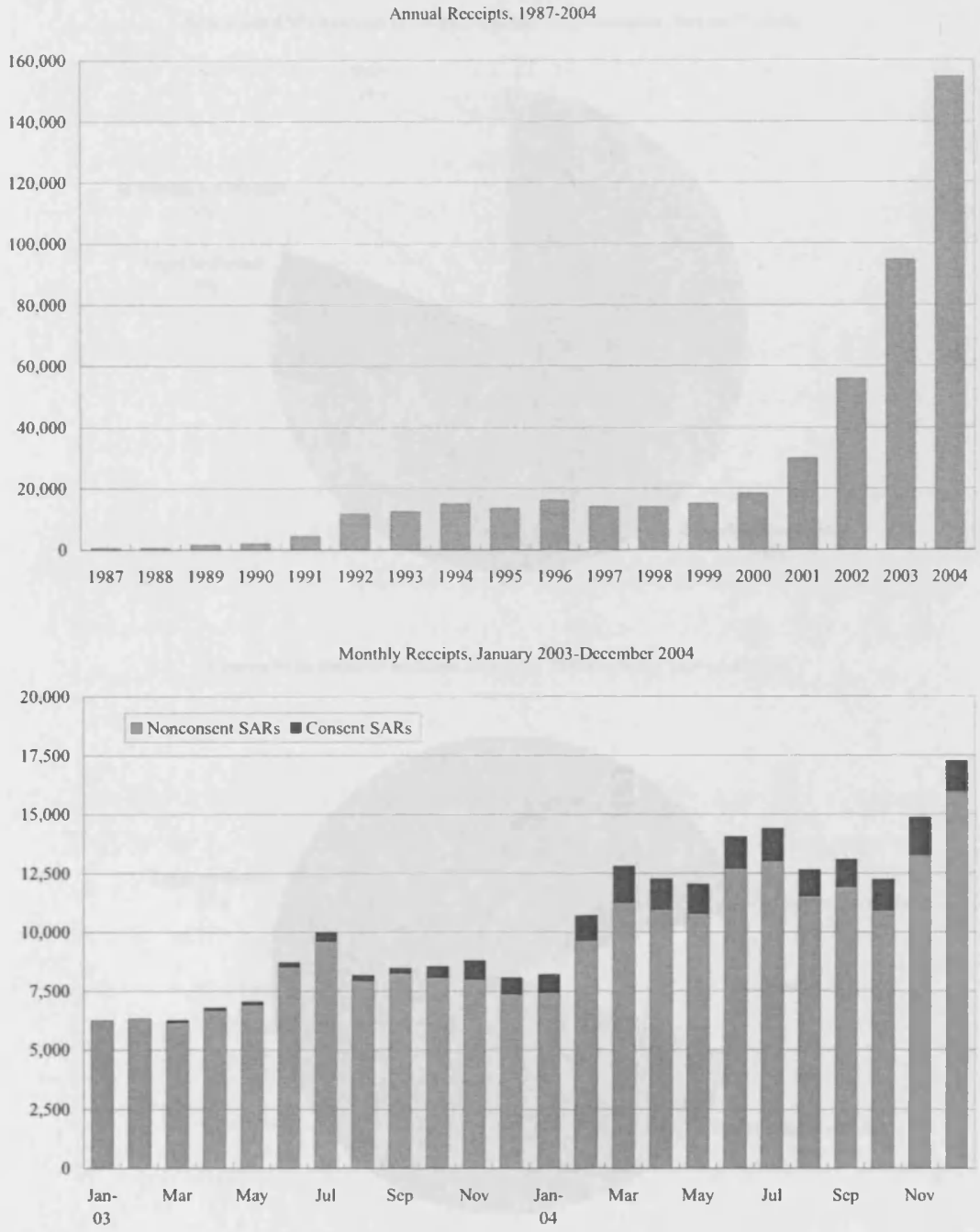
[100] At present, there are no prescribed forms on which SARs must be sent to NCIS. NCIS encourages filers to use either the Standard Disclosure Report Form or the Limited Intelligence Value Report Form, both available at http://www.ncis.co.uk/disclosure.asp. Further, there is no prescribed manner in which filers must report, though reporting entities are encouraged to use bulk submission or the *money.web* extranet.

[101] At the time the research was carried out, not all SARs were input on Elmer, though NCIS was moving to rectify this. As at March 2005, some 15,000 SARs were awaiting input; as at May 2005, this was reduced to some 3,000 SARs. Mandatory electronic reporting and prescribed forms would lighten resource demands to some extent.

and what percentage of the total is sent out) has changed significantly since publication of the KPMG report. The process can be divided into four distinct periods: pre-July 2003 (pre-KPMG); July 2003-June 2004; June 2004-Elmer rollout in May 2005; post-rollout.[102]

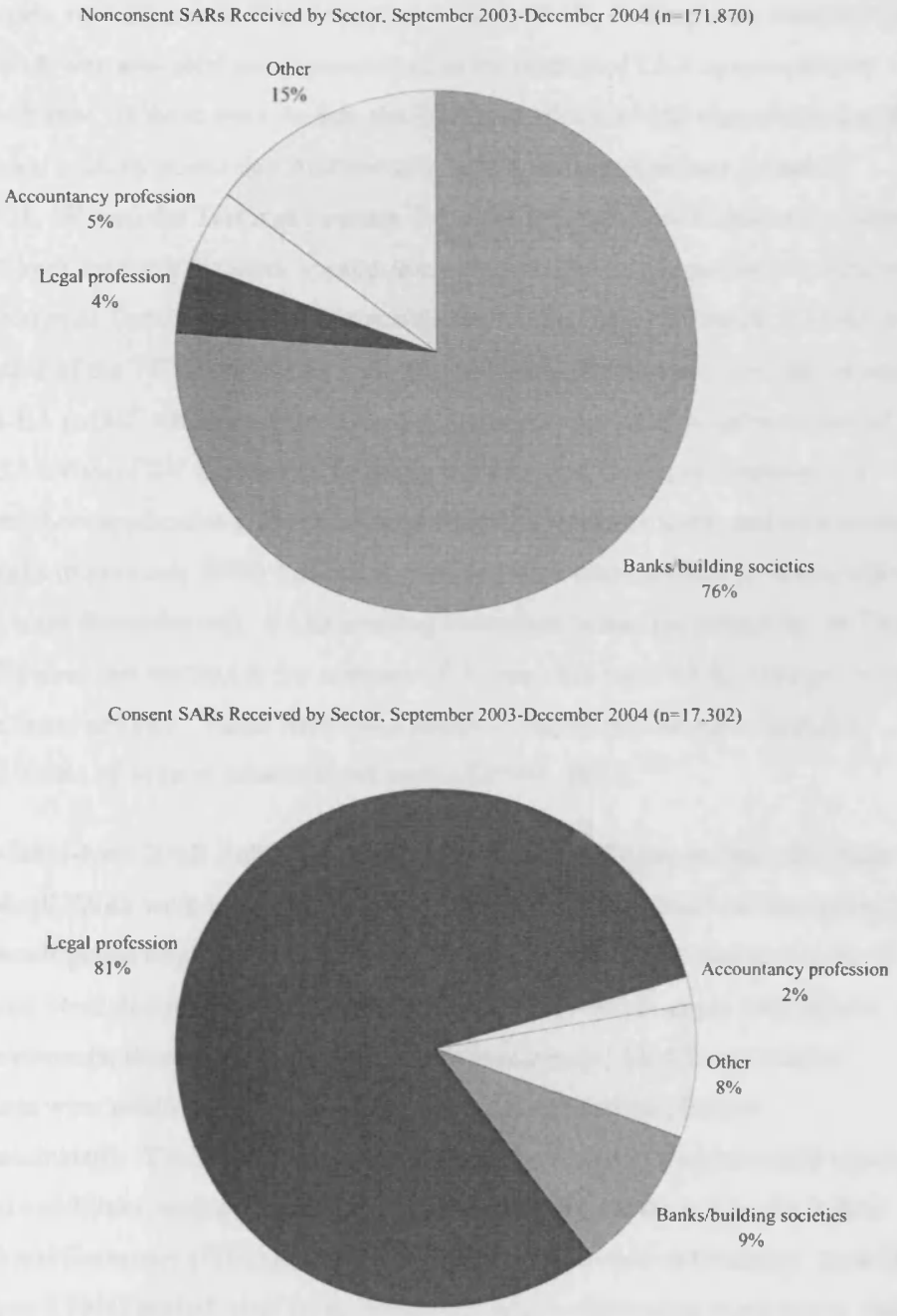
[102] Changes in the dissemination process carry implications for the present chapter. The research examines both historical information (i.e. the extent of recent use and management of SARs and deficiencies in management information) and the manner in which the Elmer rollout may affect LEA activity.

Figure 1. Annual and Monthly SARs Receipts by NCIS



Source: NCIS. Based on receipts from January-April 2005, total 2005 annual receipts should be on the order of 165,000.

Figure 2. SARs Receipts by NCIS by Sector



Source: NCIS. Note that no sectoral breakdowns are available prior to September 2003. Percentage receipts by sector are broadly stable over time. The legal profession's share of consent SARs should fall due to the Bowman v. Fels ruling of March 2005.

- Pre-July 2003: Prior to the release of the KPMG report in July 2003, all SARs upon receipt were searched against the Alert database (the NCIS database of level 3 targets, now known as Elementary) and Elmer itself. If there were database hits, the SAR was allocated and disseminated to the interested LEA as recorded on Alert/Elmer. If there were no hits, the SAR was allocated and disseminated to the relevant LEA by postcode. Additionally, staff from organisations including HMCE, IR, and the Terrorist Finance Team (TFT) sited at NCIS actively combed the Elmer database for work appropriate to their respective organisations (and to the National Terrorist Financial Investigation Unit of Special Branch, NTFIU, in the case of the TFT). All SARs were disseminated. SARs were sent out via email in "LEA packs" which contained the SAR, comma separated variable format of the SAR data (CSV format can be easily pulled into a variety of database and spreadsheet applications, like Microsoft Excel), a feedback form, and information on links to previous SARs (including previous SAR numbers and to whom/when they were disseminated). SARs needing immediate action (as judged by the Duty Desk) were fast-tracked to the relevant LEA; non-fast-track SARs were processed with lower priority. There were often delays in the dissemination of non-fast-track SARs of several months if not more (KPMG, 2003).[103]

- July 2003-June 2004: Following the release of the KPMG report and until June 2004, all SARs were individually assessed on a qualitative basis and according to the intelligence requirements of LEAs and NCIS itself. SARs assessed to be of interest were disseminated to the relevant LEA by postcode as per intelligence requirements; those which did not, through assessment, meet dissemination criteria were retained on-site (i.e. kept in the Elmer database, but not disseminated). The SARs assessed as fit for dissemination were searched against Alert and Elmer, and, occasionally, a search would be conducted on the Police National Computer (PNC) or HMCE's Cedric (now known as Centaur). As with the pre-KPMG period, staff from various agencies continued to work onsite; fast-

[103] At the time of its assessment of the UK's AML regime in 2002, the IMF found evidence of NCIS processing/analysis taking three months (IMF, 2003). Participants in Operation Kinloss, a May 2002-March 2003 Home Office-funded project intended to explore the benefit of employing ring-fenced SARs personnel, found evidence of SARs taking more than one year from disclosure to receipt by an LEA (Hicks, 2003).

track SARs were given higher priority in processing; and SARs were sent out via the LEA packs. Delays in the processing of non-fast-track SARs persisted.

- From June 2004 to the Elmer rollout (end-May 2005): With little fanfare—and with no apparent consultation with LEAs—NCIS significantly reduced the volume of dissemination of SARs to LEAs in June 2004. Staff from IR and TFT, (but no longer HMCE) still comb the database for their organisations, and three LEAs (Cheshire Constabulary, Merseyside Police, and the Metropolitan Police Service) receive semi-regular CD-ROMs with unprocessed, unevaluated raw SARs data. LEAs are encouraged to submit Elmer search requests (these have been available since well before KPMG, but their use has become all the more relevant). Those SARs which are indeed disseminated have likely been identified by IR or TFT; have been highlighted for further scrutiny through daily target and keyword searches of the database; may support a specific law enforcement initiative like Operation Payback (which is a catch-all for publicised LEA efforts designed to mainstream asset recovery and financial investigation into policing; Operation Payback represents the national concept, and also specific, local/regional blitzes of asset recovery); or are the result of NCIS analyses (e.g. searches for the most-disclosed-upon individuals) and/or product development. The disseminated SARs are still searched against Elementary, and links to other SARs are still identified (though this may not happen in all cases: support to Operation Payback and/or lists of the most-disclosed upon individuals may go out as lists of names/addresses). To explain the change in procedure, NCIS states that "the previous practice of wholesale allocation of single SARs, on a reactive basis, has been replaced with the delivery of intelligence assessments, prioritised subjects lists and targeted SARs" (NCIS, 2005), and that "the reactive, one by one allocation process risked not revealing the most capable and most prolific of money laundering suspects and not highlighting patterns and typologies" (NCIS, 2004).

- Post-rollout: As at 27 May 2005, LEAs have remote read-only, semi-searchable online access to the Elmer database.[104] Elmer is delivered via the money.web

[104] Eight LEAs (Avon and Somerset Constabulary, City of London Police, Her Majesty's Customs and Excise, Hertfordshire, Inland Revenue, Metropolitan Police Service, Scottish Drug Enforcement (continued)

extranet. All SARs are accessible to all registered users nationwide (with the exception of SARs in certain categories, including SARs dealing with terrorism). LEAs are entirely responsible for selecting the SARs they wish to view and work on. SARs are not searched against any external databases or Elmer itself for links to previous SARs (as LEAs do this themselves). LEAs wishing to search Elementary need to lodge a search request with their regional NCIS office as per long-standing established Elementary search protocols. SARs are available to print or download; feedback is provided online. NCIS states that it will continue to provide LEAs with various intelligence products and certain database queries.

- Consent SARs are disseminated differently. From March 2003-March 2004, all consents were disseminated to law enforcement for action. From March 2004 through to the present, if the consent SAR meets any of a number of criteria (e.g. property or subject leaving the UK; property is being converted to cash/equivalent, leaving the UK audit trail; the activity is fraud-related; the subject is flagged)—the consent is disseminated via fax to the appropriate LEA for action; if not, NCIS handles the consent in-house. Either way, NCIS conducts (and conducted prior to March 2004) various database checks prior to dissemination to LEAs or to the in-house approval/denial of consent. At present, NCIS handles roughly 65 percent of consents in-house, disseminating the remaining 35 percent to LEAs for action. Upon conclusion of the process (with consent being either granted or denied, or assumed if seven working days pass with no word), the consent SAR is input onto the Elmer database. The rollout of the Elmer database is not expected to affect consent procedures.

7.1.2. Scope of the Problem

But what happens to SARs once they are in the hands of LEAs? To what extent are SARs used by law enforcement? Do SARs play a role in the conviction of offenders and/or follow-on confiscations, or—despite the participation of the regulated sector—do they sit unused in office files or databases? In the event, very

Agency, Thames Valley Police) piloted the remote Elmer system in a month-long test period beginning 24 February 2005. Rollout occurred in late-May 2005. The piloting and rollout had originally been scheduled for autumn 2004, but were pushed back due to IT and legal issues.

little is known about LEA use and management of SARs in the UK (and, indeed, in many countries). This is the motivation for the present study.

This is not to say that no sources discuss SARs and law enforcement. There are some general examples of LEA use of SARs (e.g. country-non-specific examples discussed in the FATF's annual typologies exercise, or the Egmont Group's 2000 FIUs in Action publication). Specific to the UK, passing mention is made of SARs in various Money Laundering News and Proceeds of Crime Update newsletters put out by the Assets Recovery Agency (ARA) and in the 2004 Payback Time report of Her Majesty's Inspectorate of Constabulary (HMIC). The Performance and Innovation Unit of the Cabinet Office (PIU) discusses the AML regime in detail in its influential 2000 Recovering the Proceeds of Crime report, though it focuses primarily on the roles of NCIS and the FSA. Occasional isolated internal reviews of the use and management of SARs by specific units have been carried out by a handful of LEAs (e.g. Dickin, 2001; Hicks, 2003).

The most comprehensive analyses of the use and management of SARs by LEAs are carried out by Gold and Levi (1994) and KPMG (2003). Gold and Levi (1994) present an examination of the SARs regime in the early 1990s (and their study raises many issues which remain salient today, including the problems being addressed by the present research). Among other things, they look at a sample of 1,106 disclosures (referred to as FINLOGS at the time) to ascertain their contribution to criminal justice outcomes. Using a feedback/classification scheme previously employed by NCIS, they find that 1.4 percent of the sample were classified as "drug positive" or "crime positive" (i.e. involved an arrest); "this appears to be a poor total yield...", they comment.[105] They make a series of recommendations for financial institutions, NCIS, law enforcement, interagency communication and cooperation, regulators, and government. Most relevant to the present research: they recommend that the processes for the provision of feedback to the regulated entities are reviewed

[105] Gold and Levi also mention the categories of "drug suspect", "crime suspect", and "UNIDENT". The "suspect" categories refer to disclosures in which the subject was a suspect (likely identified in various database checks), while the latter refers to those cases "where officers feel instinctively that the transactions were linked to criminality but are a long way from even having evidence to satisfy themselves". The suspect categories represent 3.6 percent of the sample, while the UNIDENT represents 15.6 percent.

and potentially retooled; that NCIS becomes more proactive and successful in obtaining information on the progress of investigations; that forces should agree and develop a reasonably uniform policy with respect to acting upon and reporting back on disclosures; that more consideration should be given to protecting a certain amount of officer time from the intrusion of an excessive or uncontrolled amount of reactive work; and that government devotes sufficient funding to both reactive and proactive units to pursue disclosures.

KPMG (2003), the study widely credited with bringing about considerable change in the UK SARs regime, track a sample of 600 SARs from cradle-to-grave, in addition to other analyses.[106] They find that eleven percent of the 600 SARs contributed to a criminal justice outcome or were still being worked on; this represents some 34 percent of the 193 SARs in the sample for which outcomes were known. Further, KPMG makes 21 recommendations for improving the regime, seven of which are directed at LEAs. These include: the merging of financial investigation units on a regional basis (for smaller LEAs); the use of the ARA Centre of Excellence to develop guidance and training on use of SARs; LEA access to and use of Elmer terminals; the monitoring of LEA results and establishment of new service level agreements; the setting of LEA objectives by the Home Office which impact upon the use of SARs; the use of information available through Elmer to advertise successes of the regime; and the use of successes derived from the regime to support and assist resource allocation decisions.

But virtually no systematic information on LEA use (and management) of SARs is available for the UK. According to the PIU, "no records are kept of the quality of disclosures in the UK or the extent to which they have assisted law enforcement in prosecuting either money laundering or predicate offences" (PIU, 2000). Indeed, a large and growing list of commentators has highlighted the issue over the years, including Gold and Levi (1994), PIU (2000), International Monetary

[106] As part of the 2003 report, KPMG also carried out an intensive survey of the users of SARs, including on several of the issues relevant to the present research. Specific survey findings were not published, and contributed only generally to the final KPMG report. KPMG very generously provided its survey data to the author of this thesis.

Fund (2003), KPMG (2003), Transparency International (2003), Aldridge (2004), and HMIC (2004).[107]

A lack of systematic information on the use of SARs precludes any serious analysis of the efficacy of the AML regime in the UK and elsewhere. Admittedly, no perfect indicators exist which would allow for straightforward evaluation of the efficacy any AML regime. Reuter and Truman (2004) discuss various potential performance measures—but then note their associated and often crippling shortcomings; they do, however, get some mileage from "intermediate measures of performance such as the number of SARs, prosecutions, convictions and incarcerations, seizures, forfeitures". Recommendation 32 of the FATF's 40 Recommendations (2003 revision) calls for similar information:[108]

> Countries should ensure that their competent authorities can review the effectiveness of their systems to combat money laundering and terrorist financing systems by maintaining comprehensive statistics on matters relevant to the effectiveness and efficiency of such systems. This should include statistics on the STR [SAR] received and disseminated; on money laundering and terrorist financing investigations, prosecutions and convictions; on property frozen, seized and confiscated; and on mutual legal assistance or other international requests for co-operation (FATF, 2003).

Further, the lack of systematic information on LEA use and management affects more than an inability to empirically analyse the efficacy of the regime. It also prevents the regulated sector from better targeting disclosures, and it chips away at the desire for industry to cooperate with reporting requirements. Both are critical. The imprecise targeting of disclosures implies that industry may not be finding the offenders or terrorists of most concern—and that industry resources are not being put to their most efficient use—while a loose targeting of disclosures (and perhaps an inappropriately low bar for suspicion) has the potential to swamp or at least clog the

[107] This lack of understanding does not appear to be exclusive to the UK. International experiences are discussed later in the present chapter.

[108] The present research does not represent an empirical analysis of the efficacy of the regime. It is, however, a requisite step in that direction, exploring the current availability of intermediate measures, among other things.

system with too many SARs. An uncooperative industry has the potential to effectively shut down the system (e.g. by lobbying Parliament for change in the legislation; by collectively refusing to disclose on various grounds, pushing the issue into the courts; or by intentionally employing the very lowest bar for suspicion—though doing so within the letter of the law—thus swamping the system).[109] Lastly, compliance officers/money laundering reporting officers need information to bring to their boards to justify AML expenditures.

7.1.3. Theory: SARs from Information to Intelligence to Outcomes—and Measuring SARs' Use

The theoretical support for AML regimes in general and for SARs in particular is covered by a number of existing sources. Most cite the ability of a SARs regime to deter and displace money laundering and predicate offences; to facilitate the detection and sanctioning of such crimes after the fact; and to disrupt such crimes in progress (see, for example, KPMG, 2003; Reuter and Truman, 2004; Gold and Levi, 1994; HMT, 2004).[110]

What is little discussed, however, is how SARs should work on a day-to-day basis to prevent criminal and terrorist activity, and—in particular—to sanction such activity after the fact. SARs are often discussed in the context of intelligence. The role of SARs as intelligence—or perhaps more accurately, as information which may or may not become intelligence, an important distinction—is often subtle. This section explores the journey from information to intelligence to outcomes; the section guides and informs subsequent analysis.

What is intelligence? There are few agreed-upon definitions of criminal and/or national security intelligence (a least in the public domain), though the point is

[109] A number of sources share similar thoughts on the importance of feedback; see, for example, FATF, (2003), KPMG (2003), PIU (2000), FATF (1998), and Gold and Levi (1994). In particular, note Recommendation 25 of the FATF's 40 Recommendations:

> The competent authorities should establish guidelines, and provide feedback which will assist financial institutions and designated non-financial businesses and professions in applying national measures to combat money laundering and terrorist financing, and in particular, in detecting and reporting suspicious transactions (FATF, 2003).

[110] To these are often added "to protect the integrity of the financial system" and "to avoid economic and competitive distortions" (HMT, 2004).

clear enough.[111] Simply put, intelligence is "the considered and analysed product of systematic information gathering" (ACPO, 2001); "intelligence is evaluated information collected by various techniques for a defined purpose" (Higgins, 2004). Intelligence may be used for strategic and/or tactical (sometimes known as operational) purposes. Strategic intelligence refers to "an assessment of targeted crime patterns, crime trends, criminal organizations, and/or unlawful commodity transactions for purposes of planning, decision making, and resource allocation"; tactical intelligence is "evaluated information on which immediate enforcement action can be based; intelligence activity focused specifically on developing an active case" (Criminal Intelligence Training Coordination Strategy Working Group, 2004). In the UK, criminal intelligence (and increasingly policing) is guided by the National Intelligence Model (NIM). The NIM is a standardisation of strategic and tactical intelligence approaches and products.[112]

Are SARs themselves actually intelligence, whether tactical or strategic? As it happens, SARs as received are broadly not intelligence, not without further evaluation. The idea is as follows: "Upon discovering out-of-the-ordinary behaviour, the solver [i.e. intelligence analyst, crime analyst, investigator] looks for supporting data marking the observed signals as a true phenomenon and not just noise" (Hollywood et al, 2004). That is, initial searches of existing sources of information, including various intelligence databases or Elmer itself (to check for links with other SARs)—coupled with the reason for suspicion—serve to filter out the noise, and to contextualise the information.[113] The process of evaluating "raw" SARs—through

[111] For a discussion of the merits of various definitions of intelligence (including mention of the distinction between information and intelligence), see Warner (2002).

[112] The NIM divides criminality into three categories: *level one* for local issues; *level two* for cross-border issues; and *level three* for serious and organised crime (national and international). Policing and intelligence are guided by strategic and tactical *tasking and coordinating meetings*, all in support of the *control strategy* (which sets forth the intelligence, prevention, and enforcement priorities of the LEA). Four key intelligence products support strategic and tactical tasking and coordinating: *strategic assessments*, *tactical assessments*, *target profiles*, and *problem profiles*. For more information on the NIM, see, for example, NCIS (2000), Flood (2004), and Christopher (2004).

[113] This is not to suggest that the information-to-intelligence process works perfectly: in cross-checking SARs, a certain percentage will be wrongly dismissed as useless information (i.e. false negatives), destined not in the near-term to become actionable intelligence; some which should have been dismissed will clear the hurdle to intelligence (false positives). As SARs sit on Elmer, however, even SARs which appear useless in the near-term may at some point suggest criminal behaviour, perhaps when linked to several other SARs over the course of several years.

what are sometimes referred to as "initial checks"—is what transforms "suspicion-based information", as one NCIS staff member put it, into intelligence (and thus begins attrition).[114] The information evaluation does not necessarily need to be an involved process requiring considerable staff resources: the most efficient manner of at least some initial evaluation likely lies in the automated, electronic cross-checking of various databases (e.g. PNC) and, importantly, Elmer itself.[115] SARs evaluated to be indicative of truly suspicious behaviour may then be prioritised and further developed into usable intelligence. Intelligence development will generally entail deeper information cross-checking (from various sources of information) and analysis.

Investigation is distinct from information evaluation/intelligence development, though the line is a fuzzy one. By and large—and for the purposes of this chapter—investigation implies evidence-gathering. Investigation will accordingly require the use of various court orders (e.g. production orders, search and seizure warrants) and perhaps operational or even specialist teams (e.g. surveillance teams, firearms teams). Operational teams may be required because 1) staff evaluating information and developing intelligence packages will not always have the proper accreditation to apply for court orders; and 2) the responsibility for intelligence development may have been separated from investigation, such that different parties carry out different functions within an LEA. Financial investigation unit (FIU) staff have historically been responsible for the receipt, evaluation, and development of SARs.[116] They have also been responsible for the investigation of proactive SARs-based cases which fall

[114] There may be disagreement over the wording here: as received, SARs may be considered by some to be intelligence (in fact, SARs may or may not be classified as intelligence simply for policy reasons: items classified as intelligence must be handled and distributed according to certain guidelines). The critical point does not, however, depend on semantics: if SARs as received are *information*, then they need to be somehow evaluated and to become *intelligence*; if they are considered *intelligence* as received, they still need to undergo the same evaluation/development that turns them from intelligence to *actionable intelligence*.

[115] KPMG (2003) encouraged NCIS to carry out automated searches of Elmer, PNC, Cedric, and Alert for the prioritisation of SARs to LEAs. Thus far, there is no facility at NCIS to allow for such automated database checks.

[116] Note that the acronym FIU refers in the present chapter to a financial *investigation* unit, as opposed to a financial *intelligence* unit; the latter typically refers to the national-level organisation within a jurisdiction which receives, analyses, and disseminates SARs (and potentially threshold-based reports). NCIS is the national financial *intelligence* unit of the UK.

into the financial investigator (FI) remit, such as confiscation, money laundering. Proactive SARs-based jobs outside of FIU remits (e.g. operations relating to class A drugs), however, require assignment to operational teams for investigation through the tasking and coordinating process. Whether SARs-based cases are actually assigned to operational teams will depend on the power of the intelligence, the availability of operational resources, and the current priorities of the LEA.

Should the simple receipt of SARs by NCIS/LEAs then consistently lead directly to full-on investigations and arrests? The simple answer appears to be no, with important caveats.[117] This is for two related reasons. First, as noted above, SARs must be turned from information to intelligence (either by NCIS or LEAs, automatically or manually) prior to launching investigations. This weeding out (though not deleting) of noise is important not least because defensive reporting or mistaken suspicion on the part of filers may lead to a virtual mountain of information, some of which may be of limited value.[118] Second, law enforcement in the UK, as elsewhere, operates in a resource-constrained environment.[119] The deployment of investigative operational teams to fully investigate each and every SAR as received is almost certainly not the best use of limited resources.[120] This is the case not least because SARs may become useful as they accumulate (one SAR may or may not suggest true criminality, but multiple SARs over time may indeed suggest an ongoing

[117] This section discusses SARs in general; consent SARs may in fact lead more directly to certain outcomes than their nonconsent brethren, not least because of the need for timely action by NCIS/LEAs.

[118] *Defensive reporting* may be defined as the reporting by industry of each and every transaction with even the barest hint of suspicion. While defensive reporting is within the letter of the law (indeed, the practice exists to comply with the law), it very likely leads to false positives. The possibility remains that there may even be instances of what could be called offensive reporting, disclosures of activity in effort to deceive and/or clog the system. Also, the Bichard Inquiry flagged up misunderstandings surrounding the concept of "weeding out" of seemingly useless information/intelligence (Bichard, 2004). In the present chapter, weeding out implies the separating of wheat from chaff, though not the permanent deleting of the chaff.

[119] That law enforcement operates with constrained resources is one of the drivers behind the intelligence-led policing movement (see, for example, the demand gap discussed by Flood, 2004).

[120] In fact, it is also the case that it is likely inefficient to fully investigate each and every SAR which is defined as actionable intelligence; some activity, while illegal, may simply not be worrisome enough to warrant the use of scarce policing resources (more formally, the marginal cost of prevention/enforcement for the crime in question may be greater than the marginal benefit of preventing/enforcing the law with regard to that particular crime, bearing in mind that there are very likely dynamic aspects to the scenario).

course of crime with one or more offenders—calling for law enforcement attention). That is, in an environment of limited resources, unless a SAR clearly indicates serious criminality, it may be difficult for managers to approve the deployment of teams who may require costly surveillance support (and who will most certainly need to spend time in court obtaining production orders and the like) on the basis of a single SAR which represents nothing more than suspicion (Gold and Levi (1994) come to similar conclusions).

But herein lie the important caveats: SARs will in some cases clearly suggest the most serious of criminality, and (and/or) require little if any further intelligence development or law enforcement investigation. Even in a resource-constrained environment—or perhaps particularly in a resource-constrained environment—it would seem foolish to ignore such "hot" intelligence. In other words, while it may be the case that relatively few should be directly actioned, it seems wrong on the face of it to dismiss the potential for SARs' direct contribution. It is important that mechanisms are in place to identify such SARs (or trends in SARs which together indicate criminality).[121] Moreover, while the simple receipt of SARs may not on balance consistently lead directly to investigations, receipt should consistently lead to the kind of information evaluation—by NCIS or LEAs or perhaps both (with different sources of information), perhaps electronically—which separates wheat from chaff, potentially generating intelligence to be used for new and existing investigations.[122] Also, many SARs relate to targets of existing law enforcement operations or confiscations. Their receipt will not then lead to new investigations, but may directly play a crucial role in assisting existing ones with new information. Finally, the use of SARs in guiding the investigation and possible arrest/conviction of offenders is a tactical use; SARs may also be employed strategically, with less visible and less immediate outcomes.

[121] Gold and Levi (1994) suggested that reporting entities highlight those activities/transactions which seem highly likely to be suggestive of money laundering (in contrast to the current approach of limited value intelligence reports).

[122] The rollout of Elmer will put the onus largely on LEAs in the tactical intelligence development arena.

Some limited disagreement exists on maximising the benefit of SARs. There are occasional suggestions that SARs should not all be examined/evaluated upon receipt (by either NCIS or LEAs); rather, the appropriate use of the data is in the interrogation of the database itself with specific queries (e.g. have SARs been made against this target? or who are the most prolific money launderers?). This suggests that the two methods—evaluate SARs as received v. interrogate the database—are mutually exclusive, which they're not. It seems logical that both methods should be employed: to ignore the former is to ignore the potential for SARs to indicate intelligence on previously unknown criminal/terrorist activity, which may be imminent; to ignore the latter is to assume that critically important patterns will be apparent as and when SARS are received, which they likely won't. This is not to say that SARs as received must be fully investigated one-by-one (on the contrary, as noted above), but rather that they should at least undergo some sort of prompt initial evaluation (perhaps electronically, with keywords or various data-mining techniques, many of which could be automated) to capture the hot intelligence and to assist in workload prioritisation, in addition to database interrogation.[123]

Once intelligence, however, SARs can and in many cases should lead directly to proactive investigations or should contribute to ongoing investigations, all with various criminal justice outcomes. In this regard, there are a number of tactical and strategic uses to which SARs may be put. Perhaps the most critical point to bear in mind is that the all-crimes nature of the legislation implies that the regime is designed to be used in the prevention and enforcement of a far wider range of crimes than financial crime and money laundering alone. SARs may be useful in identifying the criminality, assets, or methods of a burglar or car thief just as much as drug dealer, VAT fraudster, or, indeed, stereotypical money launderer (and it may be the case that the personal details, like telephone numbers and addresses, are more important to law enforcement officers than the suspicious activity itself). Tactical and strategic uses of SARs are presented in Table 7.1.

[123] Notes NCIS: "the law enforcement environment is, however, a fast moving one in which matters requiring urgent attention are frequently likely to come to notice. Whilst it remains essential that the sense of direction be maintained, a fast track procedure for actioning urgent intelligence is necessary" (NCIS, 2000).

Table 7.1. Uses of SARs in an Intelligence Context

Use type	*Use*
Tactical	To identify previously unknown criminal(s)/terrorist(s)
	To identify the previously unknown criminal/terrorist activity of a known criminal/terrorist
	To corroborate known criminal/terrorist activity
	To identify criminal/terrorist networks
	To enhance existing criminal/terrorist investigations (e.g. with new avenues for investigation)
	To identify/locate assets for cash seizure/forfeiture, restraint/confiscation, and/or Hansard valuation (on unpaid tax, carried out by Inland Revenue)
	To assist in confiscation order enforcement (and, potentially, fine enforcement)
	To prevent dissipation of assets and/or to disrupt current criminality/terrorist funding (e.g. through consent SARs)
	To identify patterns of high- or low-volume reporting for regulated entity self-assessment or regulatory/LEA follow-up
	To identify the potential duplicity of regulated entities
Strategic	To contribute to strategic assessments (e.g. for the annual *UK Threat Assessment* exercise)
	To identify the main threats, risks, patterns, and emerging trends in money laundering/financial crime, including identifying typologies to provide better understanding of the problem
	To satisfy international commitments

Sources: Various, including MLRTF (2004a), FinCEN (1999), Levi (1996).

Intelligence is typically discussed in the context of an intelligence cycle (see, for example, CIA, 2002; Ratcliffe, 2004), whose steps, in order, include planning, collection, processing, analysis, and dissemination. What makes the process a cycle is the feedback loop that links the last phase, dissemination, to the next planning phase. With intelligence derived from SARs, as with other intelligence, it is critical that this loop is closed with feedback from the consumer of the intelligence to the decision-makers in planning and collection. That is, the LEA users of SARs should provide feedback on the value of the SARs-based intelligence; the uses to which it was put, such as those described above; and its impact on crime-reduction. This feedback (the feedback suggested by the FATF in its recommendation 32, discussed above) should be provided to NCIS and ultimately to industry (sanitised). It should allow for better (i.e. more precise, more meaningful, and perhaps as a result, fewer) SARs in future disclosures. Feedback should be given by LEAs to NCIS whenever SARs are examined, even when a SAR seems unrelated to crime. This may allow for better industry targeting of truly suspicious behaviour. Feedback is a powerful tool for improving the efficiency of the regime in its entirety.

It would be wrong to assume that the provision of feedback is straightforward, however. First of all, truly meaningful feedback may require the input of a number of people, including the initial users of SARs (in information evaluation/intelligence development), any investigative teams, and potentially the CPS/courts. It may be the case that whilst initial SARs users were positive on the importance of SARs (perhaps in identifying a previously unknown criminal), the resulting case was difficult to sell to operational teams (perhaps because other priorities were facing the LEA at the time, driving the control strategy in a different direction). While a consent SAR may quickly and directly lead to an outcome like cash seizure, this is probably the exception not the norm. Considerable time may pass between the initial viewing of a SAR and the final outcomes of conviction/confiscation. Complex excise cases (e.g. VAT fraud, MTIC fraud) can take years simply to get to court, let alone run their course.[124] By that time, the users of the relevant SARs, if SARs were responsible early on for initiating the investigation, may have moved on to new positions, or may have left the LEA entirely. Even those SARs initially assessed as unconnected to crime may turn out months or years later to link to other SARs, suggesting a hitherto unseen course of criminality—and requiring new feedback. Human nature may be relevant as well: investigators may wish to take the credit for successful operations, when ultimately it was the intelligence that saved the day. Lastly, while feedback should not be time-consuming (once policies and procedures are ironed out, the actual feedback itself may require only minutes or even seconds), comments received in this research suggest a perception on the part of LEAs that time spent providing feedback is time diverted from actual crime-fighting. This is not the case, though LEAs may need to be given certain feedback incentives to compensate for this belief.

Finally, interpreting and analysing the feedback, particularly in gauging the efficacy of the regime, is itself complicated. The FATF and others all rightly call for some feedback/intermediate measures of the use of SARs. After all, such measures (which are based primarily on an understanding of how LEAs use SARs, most efficiently won through some sort of feedback mechanism), are critical for understanding the contribution that an AML regime makes to the reduction of

[124] Along these lines, note that the Inland Revenue use of SARs is naturally historic: SARs are of less importance to investigations unless the relevant tax forms have been returned to IR.

crime/terrorism. But this doesn't imply that such measures are easily understood.[125] Uses of SARs are not mutually exclusive: one or many SARs, for example, may indicate unknown criminality and prevent dissipation of assets for the same offender. Or many SARs together will be used to illustrate the pattern of offending of a lone individual. As an example, assume that the regulated sector files 100 SARs in a year. Feedback may suggest that these 100 result in one conviction, but it may be the case that 10 or even 50 of the SARs played a role in that conviction. It might be misleading, then, to look at the number of convictions resulting from SARs (one conviction secured as the result of 100 SARs filed), though perhaps less misleading to look at the number of SARs which contributed to a conviction (10 percent of the 100 SARs filed contributed to a conviction).[126] Of course, many SARs will be received relating to people already under investigation; an indicator such as SARs launching proactive investigations must then look at SARs launching proactive investigations as a percentage of SARs received relating to people not already under investigation, not all SARs received. And what is the basis for performance assessment? Is the hypothetical 10-percent-of-the-100-SARs-filed example indicative of a successful regime, or one in need of work? Should such feedback be interpreted as indicative of the failure of SARs to reduce crime, or of limitations in the functioning of the regime itself (e.g. SARs when disseminated were too old to be of significant use)?[127] Lastly, feedback and intermediate measures suffer from one inescapable but crucial weakness: they cannot capture the unknowable counterfactual (i.e. what would have happened in the absence of the regime). SARs most certainly deter money laundering and predicate criminality/terrorism—but the level of deterrence is very difficult to determine empirically.

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[125] This is also pointed out by the MLRTF in its Second Report to Ministers. HMIC (2004) suggests that simple measures like the percentage of SARs leading to investigations are misleading, though no specific alternatives are offered.

[126] Timing is also a complicating factor: because no immediate investigation/conviction doesn't imply that no investigation/conviction will ever take place, it might be most appropriate to consider the number of SARs contributing to a conviction as a percentage of the SARs filed in the previous year (or even the year before that), not least because the number of SARs filed per annum has been increasing. Finally, the interpretation of feedback on SARs contributing to convictions should be mindful of the fact that once in the courts, cases may fail due to outside factors unrelated to SARs (the same goes for prosecutions, confiscations, and the like).

[127] Gold and Levi (1994) usefully differentiate between implementation failure and theory failure.

What are the implications for the regime and the research? All of the above is simply to suggest not that indicators are fatally flawed, but that interpretations of statistics on the use of SARs are proxies for the truth, and must be mindful of the details of what is being measured. This should be considered later in the present chapter when interpreting findings. Moreover, knowing what can reasonably be expected of SARs from information to intelligence to outcomes helps to analyse what is done in practice.

7.2. Data

The findings below are based on data gathered through LEAs throughout the UK on their use and management of SARs. Information is drawn from a survey of LEAs; formal site visits with selected LEAs; discussions with a broad swath of the LEA SARs community; and data provided by NCIS, HMIC, and KPMG. For the survey of LEAs, responses were received from 49 of the 50 LEAs in the primary SARs user community (NTFIU declined to respond to the survey for security reasons, so it would be fair to say that the response rate was 100 percent). Site visits were carried out with City of London Police, Devon & Cornwall Constabulary, Her Majesty's Customs and Excise, Inland Revenue, Metropolitan Police Service, National Crime Squad, Norfolk Constabulary, NTFIU, Scottish Drug Enforcement Agency (informed also by a visit with Strathclyde Police), and West Midlands Police.

Note that LEA data on the uses of SARs are disappointingly limited. True, the LEA survey explored very precise concepts—including those aforementioned concepts called for by the FATF (through recommendation 32)—in order to understand both the information maintained and the broader information management practices of LEAs.[128] Even for those LEAs with strong record-keeping tendencies, it was expected that many concepts would be too specific. Further, responding to surveys is not the core responsibility of LEAs. As such, only information which was readily available was requested. A number of LEAs indicated that they could dig

[128] The outcome queries concentrated on those concepts commonly referred to by the FATF (Reuter and Truman's "intermediate measures"). Certain concepts were not included, though not for lack of interest; these included queries on the use of production orders, arrests, and the number of SARs received on the same subject. Fewer concepts were recorded with consents, as they are generally regarded as more quick-and-dirty than nonconsents and are often treated somewhat differently (several of the nonconsent concepts may have been applicable, however).

through their records by hand to provide some of the information (but didn't); this is discussed below. Table 7.2 sets forth the number of LEAs providing a numerical response—as opposed to saying not readily available—for each variable captured in the LEA survey on nonconsent and consent SARs (out of a total of 49 LEAs). All things considered, however, a considerable—and discouraging—number of data points for both nonconsent and consent outcomes were classified by LEAs as not readily available.[129] The most difficult variables to come by appear to be number of nonconsents relating to an existing recorded crime and number of nonconsents resulting in a crime being recorded. These questions relate specifically to Home Office crime recording rules, and were suggested by one of the LEAs piloting the survey. It may be the case that these concepts are far too specific, or perhaps too complicated, for most LEAs with their very limited record-keeping abilities.[130]

[129] In fact, 63.3 percent of the total number of nonconsent data points and 56.3 percent of the total number of consent data points in the survey were classified as not readily available by the 49 LEAs.

[130] Of those LEAs providing limited or no information, the vast majority cited limited IT capacity, followed by lack of resources (particularly clerical support). Most LEAs use Word or spreadsheet applications to manage the SARs process in terms of tracking officers' workloads (and sometimes the status of initial checks), but no information is captured on outcomes (see page 158 for more on LEA IT solutions). A small number of LEAs could not separate nonconsent and consent figures, as they used common IT approaches with no consent identifier. On a positive note, several LEAs had begun new record-keeping procedures (with new IT) in the last year; they could not provide statistics on outcomes yet, but hope to do so in the future. There already does seem to be an improvement in the 2004 data. This may be due to more managerial interest in financial investigation. It's not that the outcomes data were impossible to assemble: for the LEAs with limited or no information on outcomes, most stated that the information was indeed available, just not in an easily obtainable format (though eight of the 49 LEAs indicated that the specific missing variables were really not known at all). Difficulty with outcomes information appears to have been expressed by the units whose remit is limited to intelligence development: as all packages are sent elsewhere in the organisation for action, these units are dependent on others (perhaps nationwide) for feedback. Six LEAs claimed that statistics were not readily available for any of the variables, including the number of SARs received from NCIS for each year.

Table 7.2. Annual Nonconsent and Consent Outcomes Metadata, 2003-2004

	Number and percent of the 49 LEAs for which information was available			
Variable	*2003*		*2004*	
Nonconsent SARs				
Total number of nonconsent SARs **received**	31	63.3%	36	73.5%
Number of nonconsents undergoing **initial checks**	30	61.2%	32	65.3%
Number of nonconsents **investigated beyond initial checks**	17	34.7%	22	44.9%
Number of nonconsents **launching a proactive investigation**	16	32.7%	18	36.7%
Number of nonconsents **relating to an existing recorded crime**	10	20.4%	14	28.6%
Number of nonconsents **resulting in a crime being recorded**	10	20.4%	13	26.5%
Number of nonconsents contributing to a **prosecution**	13	26.5%	18	36.7%
Number of nonconsents contributing to a **conviction**	13	26.5%	15	30.6%
Number of nonconsents contributing to a **cash seizure**	18	36.7%	21	42.9%
Number of nonconsents contributing to a **cash forfeiture**	17	34.7%	19	38.8%
Number of nonconsents contributing to a **restraint**	15	30.6%	19	38.8%
Number of nonconsents contributing to a **confiscation**	13	26.5%	15	30.6%
Amount of cash **seized** through nonconsents (GBP)	18	36.7%	19	38.8%
Amount of cash **forfeited** through nonconsents (GBP)	17	34.7%	18	36.7%
Amounts **restrained** through nonconsents (GBP)	14	28.6%	16	32.7%
Amounts **confiscated** through nonconsents (GBP)	13	26.5%	14	28.6%
Consents SARs				
Total number of consent SARs **received**	24	49.0%	33	67.3%
Number of consents **granted**	21	42.9%	29	59.2%
Number of consents **refused**	23	46.9%	32	65.3%
Number of consents contributing to a **prosecution**	18	36.7%	26	53.1%
Number of consents contributing to a **conviction**	16	32.7%	24	49.0%
Number of consents contributing to a **cash seizure**	16	32.7%	26	53.1%
Number of consents contributing to a **cash forfeiture**	16	32.7%	23	46.9%
Number of consents contributing to a **restraint**	16	32.7%	23	46.9%
Number of consents contributing to a **confiscation**	16	32.7%	20	40.8%
Amount of cash **seized** through consents (GBP)	18	36.7%	24	49.0%
Amount of cash **forfeited** through consents (GBP)	16	32.7%	19	38.8%
Amounts **restrained** through consents (GBP)	18	36.7%	22	44.9%
Amounts **confiscated** through consents (GBP)	16	32.7%	22	44.9%

Source: Survey of LEAs. N=49 LEAs overall. Not all data points come from the same LEAs. For example, an LEA may have stated that the number of nonconsent SARs received *was not readily available, but may then have provided figures for the* number of nonconsents launching a proactive investigation *(perhaps because this was zero, and was thus easily knowable). Fewer concepts were recorded with consents, as they are generally regarded as more quick-and-dirty than nonconsents and are often treated somewhat differently. Lastly, the Inland Revenue has powers others do not, including Hansard valuations and Avoidance (fraud work opened under IR code of Practice 8); these are not captured above, though SARs contribute to such work.*

LEAs were asked in the survey whether they could easily track the progress of a SAR from the date of receipt to eventual outcome, such as prosecutions/convictions. Forty of the 49 LEAs noted that they could easily track the progress of SARs to outcomes, yet this does not appear to be the case (somewhat surprisingly, the ability to easily track outcomes appears uncorrelated with the actual provision of outcomes statistics, above). It is difficult to imagine that there are LEAs which keep no management information whatsoever, not even the number of SARs received from NCIS. This may all be suggestive of a disdain for record-keeping—a short-sighted position, given that it's very difficult to argue for more resources (or to criticise facets of the regime) without proof of the problem. This may also be suggestive of a lack of clerical resources and/or limited IT fluency (most LEAs who indicated they could track SARs from cradle to grave described some sort of IT solution; can these IT platforms really not provide aggregate statistics at all?).

7.3. Findings

So how do law enforcement agencies in the UK use and manage SARs? Do SARs appear under-utilised? How adequate are LEA statistics on use? Is feedback ever given? While recognising that the sections to some extent overlap, findings specific to the UK are presented in sections on the users of SARs; management of SARs (processes); uses of SARs (outcomes); feedback to NCIS/industry; and the system in flux.

Users of SARs

The LEA SAR user community is broad. It comprises 50 primary user organisations: the 43 territorial police forces of England and Wales; the Police Service of Northern Ireland (PSNI); the Scottish Drug Enforcement Agency (SDEA), which since end-2002 has been the SARs conduit for the eight Scottish territorial police forces and the SDEA itself; and a number of national LEAs, including the Department of Work and Pensions (DWP), Her Majesty's Customs and Excise (HMCE), Inland Revenue (IR), National Crime Squad (NCS), and the National Terrorist Financial Investigation Unit (NTFIU). This research will focus on 49 primary users; much

NTFIU use and management information is too sensitive for publication.[131] For completeness, note that the Assets Recovery Agency (ARA) employs SARs in its work, though generally by requesting them from NCIS. The Financial Services Authority (FSA) occasionally receives SARs relating to regulatory matters. NCIS itself is also a user of SARs: NCIS divisions may utilize SARs in other NCIS work (e.g. on drug trafficking), and the NCIS SFI uses SARs in tactical and strategic intelligence product development. Primary users are presented in Table 7.3, which illustrates SARs allocated and disseminated to the 49 LEAs in 2003 and 2004.[132]

[131] Very little information on the work of the NTFIU is available in the public domain, though see HMT (2002).

[132] SARs are occasionally sent to the law enforcement or equivalent sections of a number of other organisations, including the British Transport Police, Department of Trade and Industry, Ministry of Defence Police, and the Serious Fraud Office. The five Regional Asset Recovery Teams set up in England and Wales in 2003 and 2004 employ SARs through search requests, but do not otherwise actively receive SARs from NCIS. These organisations were not included in the research proper. SARs may also be sent to national financial intelligence units in foreign jurisdictions, usually at their behest.

Table 7.3. Primary Users of SARs (with 2003-2004 Annual Allocations and Disseminations)

	2003		*2004*	
LEA	*Allocations*	*Total disseminations*	*Allocations*	*Total disseminations*
Avon & Somerset Constabulary	1,337	527	1,867	204
Bedfordshire Police	866	280	1,389	120
Cambridgeshire Constabulary	735	303	1,159	165
Cheshire Constabulary	713	236	1,279	158
City of London Police	503	366	695	269
Cleveland Police	399	204	595	77
Cumbria Constabulary	317	165	392	82
Derbyshire Constabulary	706	324	1,043	110
Devon & Cornwall Constab.	971	439	1,597	161
Dorset Police	700	294	1,202	100
Durham Constabulary	376	151	510	90
DWP	330	103	889	1,147
Dyfed Powys Police	328	93	650	73
Essex Police	1,502	568	2,145	237
Gloucestershire Constabulary	403	232	582	78
Greater Manchester Police	3,078	1,070	5,050	520
Gwent Police	330	105	586	64
Hampshire Constabulary	1,508	505	2,156	195
Hertfordshire Constabulary	1,106	455	1,632	138
HMCE	13,357	28,663	6,398	10,573
Humberside Police	604	267	968	99
Inland Revenue	5,406	4,127	9,126	9,662
Kent Police	1,413	713	2,042	276
Lancashire Constabulary	1,658	599	2,756	302
Leicestershire Constabulary	1,136	579	1,681	203
Lincolnshire Police	363	162	643	124
Merseyside Police	1,154	1,003	1,789	260
Metropolitan Police Service	27,093	11,229	39,150	3,846
NCS	443	498	372	379
Norfolk Constabulary	586	231	925	131
North Wales Police	381	107	680	55
North Yorkshire Police	372	188	627	115
Northamptonshire Police	556	231	844	88
Northumbria Police	1,096	437	1,545	150
Nottinghamshire Police	1,057	441	1,519	145
PSNI	3,210	1,070	4,125	1,473
SDEA	3,369	2,216	4,472	751
South Wales Police	912	619	1,311	174
South Yorkshire Police	1,223	592	1,809	244
Staffordshire Police	829	296	1,287	159
Suffolk Constabulary	578	203	732	90
Surrey Police	2,068	550	3,151	263
Sussex Police	1,526	546	2,223	223
Thames Valley Police	2,843	983	4,666	326
Warwickshire Police	336	114	548	51
West Mercia Constabulary	1,017	293	1,653	185
West Midlands Police	3,862	1,595	5,985	666
West Yorkshire Police	2,489	951	3,709	398
Wiltshire Constabulary	532	175	979	70

Source: NCIS. Total disseminations include LEA-bound consents and SARs which have been copied to more than one LEA (this explains why HMCE, for example, has more SARs disseminated than were originally allocated). Total disseminations exclude SARs related to terrorism and various other sensitive issues; SARs destined for overseas jurisdictions; SARs sent out in bulk backlog-clearing exercises (see footnote 139); and SARs sent to NCIS units other than SFI. NTFIU allocations and disseminations are classified. SARs may also be allocated and disseminated to certain specialised users, who are not presented here. NCIS SFI is also a user of SARs. SARs are occasionally disseminated directly to various Scottish forces (as a result of specific search requests or flagged targets); these have been included with the SDEA figures.

Unit types: Units which deal with SARs vary in size and composition. Three models prevail: 1) the FIU with shared SARs responsibility; 2) the ring-fenced SARs development unit within an FIU; 3) and the financial intelligence development unit (FIDU). FIUs are the traditional users of SARs.[133] The FIU with shared SARs responsibility refers to the FIU found in many police forces which deals with all things POCA, including cash seizure, confiscation, and SARs. All staff deal with SARs as and when they can. Because SARs work is not protected, however, other FIU priorities (e.g. confiscations, cash seizures) may overwhelm the time available for SARs development. The upside of the shared-responsibility approach is that staff evaluating/developing SARs can and do also carry out the investigation of certain SARs packages. The second approach, the ring-fenced SARs development unit model, refers to what is a subunit of the FIU with a specific remit to deal with SARs (and financial intelligence development). SARs development may be handled by one FI (often a retired police officer rehired as a civilian accredited FI) or sometimes a researcher or clerk or indeed sometimes a team thereof. The benefit of this type of unit is that resources are fully devoted to evaluating and subsequently developing SARs into intelligence packages for use by the wider FIU or to be sent to tasking and coordinating to become full-blown investigations. The workload of this unit-within-a-unit model typically is restricted only to information evaluation/intelligence development; no investigation is carried out. Despite the name, staff are not always ring-fenced, and may occasionally be called to perform other duties, but the concept is one of a separation of responsibilities. The last model is the FIDU, which is responsible solely for evaluating information and developing intelligence packages (not investigating), like the ring-fenced model, but is larger—and independent of the FIU. FIDUs are typically found in larger LEAs, like the MPS and SDEA. FIDU work is to some extent more analytically advanced than with the smaller ring-fenced model. Not surprisingly, there is some limited evidence which suggests that the FIDU/ring-fenced models are more efficient than the shared-responsibility model, as

[133] Several police LEAs have Economic Crime Units, which for all intents and purposes resemble FIUs (these Economic Crime Units may house FIUs and Fraud Squads). For the purposes of this chapter, Economic Crime Units will be considered as FIUs. Also, for two national LEAs, SARs are initially sent to a central unit simply as a point of receipt, from which SARs are sent to FIUs in the appropriate regional offices for evaluation/development/investigation. These organisations have been classified as using the *FIU with shared SARs responsibility* model.

SARs cannot simply fall through the cracks (Hicks, 2003). Twenty-eight LEAs appear to employ the shared-responsibility model; 18 LEAs use the ring-fenced approach; and three LEAs have FIDUs.

Resource levels: The 49 LEAs were asked about the overall levels of full-time equivalent (FTE) staffing of their units, and the number of FTE staff dedicated to SARs duties (i.e. evaluation/development, not investigation, which will happen with a wider community of staff LEA-wide). LEAs identified a total of 520.5 overall FTE staff, of which 80 were dedicated to SARs. The overall figure is a lower-bound estimate of the number of overall staff, as two LEAs provided no information in this regard (one of which is a national organisation with at least 50 relevant staff); several LEAs also have staff in the field (outside of headquarters units or, in the case of the SDEA, in the Scottish territorial forces) who will perform relevant duties. Similarly, the latter figure on SARs-dedicated staff is itself an underestimate. As noted above, most LEAs employ the shared-responsibility approach to dealing with SARs. Sadly, no indication was given concerning the percentage of overall staff dedicated to SARs-related activities. Assuming 15 percent of work-time is dedicated to SARs in these units (as does KMPG (2003), guided by HMCE), this implies that the total level of SARs-dedicated staff is 119 nationwide (80 from above + 39 from the shared-responsibility units).[134] Assuming 25 percent of work-time is dedicated to SARs (which may have been the case prior to the June 2004 slowdown of nonconsent dissemination), this implies that the total level of SARs-dedicated staff nationwide is 145. All of this is relatively consistent with KPMG (2003), which identified some 500 overall staff and 157 SARs-dedicated staff nationwide.

That said, ARA maintains statistics on the number of course attendees for its courses (though it has no firm count of the number of FIs performing FI duties, as some may have been trained but then relocated to other tasks). As at December 2004, these included 762 for the initial FI course; 348 for the confiscation course; and 151 for the money laundering course. Undoubtedly there is overlap between the attendees, but this is certainly suggestive of at least 762 FIs nationwide, a good number of whom will deal with SARs. Further, NCIS has trained approximately 250

[134] Gold and Levi (1994) also suggest that FIs spend roughly 15 percent of their time on SARs.

LEA personnel on use of the Elmer database to support the rollout. Many of these 250 also hold the responsibility of further training personnel back in their LEAs, suggesting that the these estimates of FTE SARs-dedicated personnel may be low

Resource levels remain little changed since 2002 (10 LEAs identified SARs-specific increases of 19 staff—though eight LEAs provided no information in this regard). This is particularly disappointing considering the 176 percent growth in SARs reporting by the regulated sector between 2002 and 2004 (though there was little associated growth in dissemination from NCIS). In the event, a small number of LEAs hired staff in 2004 specifically to deal with SARs. Because NCIS significantly reduced the dissemination of nonconsent SARs in June 2004 (with no consultation with LEAs), some of these new staff were subsequently pulled to other duties.[135] These few LEAs hope that they will be able to pull the new staff back to SARs-related work when Elmer is rolled out. Many LEAs noted that they intend in the future to hire new personnel to deal with Elmer, who are not included here.

FIB v. FIU: Lastly, an ACPO position has emerged from the ACPO Proceeds of Crime Working Group concerning the responsibility for SARs and the Elmer database when rolled out to police forces (this is not relevant for non-police agencies, of course). Though the policy appears not to be set in stone, forces are encouraged to give much responsibility on SARs, through Elmer, to force intelligence bureaux (FIBs). The idea is that SARs will be mainstreamed by giving Elmer to FIBs, who should have a finger on the broader pulse of criminality in the area than FIUs—and who may thus make broader use of SARs. An informal survey of FIBs conducted on behalf of the author by the ACPO Lead on Intelligence Issues suggests that FIBs are not necessarily opposed to the concept, though with certain caveats. FIBs did feel that access to Elmer would be of use. But FIBs didn't seem to want sole responsibility for SARs (comments suggested that resource constraints would prevent FIBs from evaluating SARs upon receipt).[136] So if both FIBs and FIUs will be dealing with SARs, it is critical that steps are taken to prevent any duplication of effort.

[135] These few LEAs could have tasked new staff to more proactively/aggressively engage with NCIS on SARs-related work; it's unclear why this didn't happen.

[136] And FIBs would presumably have no interest in becoming involved with the consent process.

Conversations with the current police users of SARs suggest opposition to the FIB policy. This is likely in part due to a parochial desire to protect FIU turf—but certain issues deserve consideration. There seems to be some fear that broadening the user base to FIBs might be a threat to quality control: will FIB personnel recognise the often complex varieties of financial crime (like certain frauds)? More importantly, there is a worry that FIB personnel won't follow through on the critical issues surrounding the confidentiality of SARs (including consistent application for Public Interest Immunity). And most FIUs already coordinate to some extent with FIBs: more than 90 percent of the LEAs appear to log some or all SARs received on force intelligence systems. While an excellent step toward the mainstreaming of SARs/Elmer, the FIB policy needs further consideration/modification with input from both FIs and intelligence officers.

Management of SARs (Processes)

What, then, happens to SARs upon receipt by the LEAs? As noted in Chapter III, SARs may be evaluated upon receipt (and subsequently developed/investigated if appropriate); SARs may also be subjected to deeper interrogation/analysis of the who are the most prolific offenders sort. On the former—which seems to be the approach employed by most LEAs—SARs are dealt with in three main stages: information evaluation, intelligence development, and investigation (see pages 135-140 for background information on the progression of SARs from information to intelligence to outcomes; note that the three stages are an heuristic device of the author, and are not necessarily referred to by name by LEAs in their daily work). Not surprisingly, workflow is fairly uniform across LEAs, though the depth of work varies, as does the percentage of SARs subject to various stages of the process. The nonconsent process is described first, followed by consents.

Nonconsent process: Upon receipt, SARs are typically logged onto the unit's internal database and thus begins information evaluation. The information evaluation stage is used to separate wheat from chaff. This is done through basic database checks and a reading of the SAR itself (particularly the reason for suspicion). The majority (nearly 75 percent) of the LEAs reported that all SARs received undergo initial database checks. Databases checked commonly include PNC and other national sources of information (e.g. Companies House, Land Registry) as well as

local intelligence systems, including that of the unit itself (with previously received SARs).[137] LEAs stated that SARs received on known nominals, relating to ongoing investigations, or with other positive database hits are generally progressed to intelligence development. SARs without any hits are typically retained for intelligence only (feedback will often be sent to NCIS at this point).[138] A few LEAs specifically noted that the text of the SARs themselves would be sufficient to generate further activity. Several LEAs reported that they simply did not have the resources to give SARs much more than a cursory read, if that—let alone carry out database checks. Similarly, a few others noted that everything was dependent on the daily workload: a heavy workload on the day of receipt implied few SARs were evaluated (this seemed to be the norm for these LEAs). Those LEAs who don't subject SARs to any initial checks (evaluation) will clearly miss SARs received on current targets (i.e. subjects of ongoing investigations) and perhaps imminent criminal activity. The rollout of Elmer will have implications for information evaluation; this is discussed is greater detail below (see page 173). In short, LEAs will need to find methods of evaluating SARs which don't command undue levels of resources; Phase II of the Elmer rollout will likely go some way to alleviating resource issues with advanced analytical capabilities.

The SARs which through information evaluation warrant further work are developed into intelligence packages. The intelligence development stage of the process includes firmer identification of SAR subjects and associates, banks accounts, assets held, and the source of funds (and analysis thereof). Reporting institutions are usually contacted (or may have been contacted in information evaluation, above). Any SARs relating to ongoing investigations are typically forwarded to the relevant unit within the LEA. LEAs noted that priority is often given in this stage to developing packages relating to current performance indicators, mostly confiscations and cash seizures, or larger force/national priorities. A small number of LEAs reported using systems/checklists/matrices to prioritise those SARs for

[137] National LEAs—particularly HMCE and Inland Revenue—appear to have broader sources of information at their disposal.

[138] SARs retained for intelligence only include SARs received with no apparent suspicion.

evaluation/intelligence development based on set criteria. Such prioritisation systems will presumably be a necessity with the rollout of Elmer.

Intelligence development ends at the need for evidence gathering—where investigation begins—through various court orders and the like. Intelligence packages which require proactive investigation are sent to NIM tasking and coordinating for potential assignment to operational teams (surveillance teams, serious and organised crime teams, drugs teams, etc.). Intelligence packages for money laundering teams—packages put together by these same teams—seem to be handled in the FIU without going to the broader tasking and coordinating forum. SARs-based work vies for resources with other work brought to tasking and coordinating. The majority of LEAs suggested that less than ten percent of jobs (i.e. cases) in their units based on SARs required allocation to operational teams/outside units. This seems low; there are some indications that the question was understood to read what percentage of jobs are actually assigned to (i.e. taken on by) operational teams, not what percent would need operational assistance.

Consent process: The consent process is slightly different. NCIS will have carried out some initial checks on national databases by the time a consent is sent to LEAs; the LEAs will typically run local database checks (e.g. local force intelligence databases). Consent will then be either granted or denied, depending on the results of checks. In some cases, consent will be granted to tee off a proactive cash seizure. Most LEAs (nearly 85 percent of the 49) reported that they prioritise consents over nonconsents, and LEAs appear to believe that consents must all be acted upon. This is in contrast to comments received by NCIS which suggest that LEAs have the choice to work on consents or not; they can either give immediate consent or let seven working days pass with no action (in which case consent is assumed). The choice would fall with the LEA, presumably driven by resource constraints. And on resource constraints: LEAs were asked what percentage of the unit's resources were consumed dealing with consents. Nearly 90 percent of the 49 LEAs stated that consents consume 20 percent or less of the unit's resources. Of course, many LEAs will have considerable amounts of other work to do (particularly those units employing the FIU with shared SARs responsibility model), so this percentage may be sufficiently high

to be disruptive. This number may be less meaningful given the June 2004 reduction in nonconsent SARs, as LEAs may have more available time to action consents.

Interrogating the information/intelligence: One thing is to evaluate/develop SARs as received; another is to interrogate the information/intelligence. In the absence of access to Elmer (i.e. prior to rollout), interrogation occurs by turning to internal LEA databases which house information on those SARs disseminated by NCIS to the LEA and/or by sending search requests to NCIS to search Elmer in its entirety. And two main types of interrogation exist: 1) questions on known targets, like does this current operational target have any SARs filed against him/her?; and 2) questions which let the data speak for themselves, like who is the most-disclosed upon individual in the boundaries of the LEA?. LEAs were asked the following question: for those investigations which have not been launched by the receipt of one or more SARs, do you ever turn to SARs (i.e. your SARs database or files, or force intelligence if SARs are loaded there) as a source of information/intelligence? Nearly 90 percent of LEAs reported that they would turn to SARs in this manner. But there was only limited evidence of LEAs using SARs for advanced analytical work, and very few LEAs appear to interrogate SARs with the who is the most-disclosed upon type of questions. LEAs do not yet seem to have tuned in to this analytical approach. On search requests: the 49 LEAs filed 1,418 search requests in 2003 and 2,210 in 2004, for a total of 3,628 search requests filed in the two years together (the vast majority of which were filed by HMCE, Inland Revenue, and the MPS). It is difficult to say if this represents an under- or over-reliance on the search request mechanism. There was a noticeable increase of search requests filed as a percentage of SARs disseminated to the 49 LEAs beginning in June of 2004, at which point NCIS reduced the number of nonconsent SARs disseminated for action. Interestingly, this seems to be the result of a decrease in disseminations, not an increase in search requests (one would have imagined an increase in search requests to compensate for the reduction in disseminated nonconsent SARs). A number of LEAs suggested that because the search request process was laborious and too time-consuming, it was little-used. Clearly, the rollout of Elmer will greatly assist in information/intelligence interrogation and largely obviate the need for search requests.

Automation: Perhaps not surprisingly (though disappointing nonetheless), only four LEAs reported that any part of the information evaluation/intelligence development process is automated. Automation in this case refers to automated database checks (i.e. checking one or more names or addresses against multiple databases at once). While allowing for automation likely has significant up-front costs, it also likely has considerable savings through massive efficiency gains on the back-end. It seems legitimate that at least national database checks should be automated, such as PNC and HMCE's Cedric/Centaur (KPMG called for this in its 2003 report). Hits could be highlighted in Elmer when rolled out (though this would take some time, perhaps several years, to develop). This reinforces calls made in Bichard (2004) for national IT development along the lines of Scotland (with its Scottish Intelligence Database; the SDEA was one of the respondents noting automation in its SARs processes.

Information Technology: The IT approaches used by most LEAs to manage SARs are extremely limited. The majority of LEAs employ Microsoft Word and/or Microsoft Excel to track allocation of a received SAR to the responsible staff member (who will evaluate the information). A limited number of LEAs use true case management systems. Alternatively, a very small number of LEAs do little but print and file hardcopies. Elmer will not be of much use in terms of work-load/case management, as Elmer is not a case management system. There may be a need for a standard case management approach for SARs (and broader LEA work). LEAs were also asked if they could easily cross-reference a SAR against other SARs with their current systems/approaches. More than 80 percent responded in the affirmative. But it seems very unlikely that those LEAs using Word/Excel/hardcopies are maximising the investigative benefits of SARs, as it appears improbable that SARs can be efficiently interrogated/analysed in this fashion.

Force intelligence: The vast majority of LEAs indicated that SARs are entered on wider force intelligence systems (national systems for the national LEAs). Just under two-thirds of the 49 LEAs log only those SARs which undergo intelligence development (i.e. those clearing the information evaluation hurdle) on force intelligence systems. As noted, these will include SARs relating to known nominals, to ongoing investigations, or with other positive database hits. Nearly one-third of

LEAs appear to log all SARs received. To protect the confidentiality of the information, most LEAs only place interest markers on force intelligence systems. These inform other LEA staff only that intelligence is held on the individual in question; interested parties must contact the FIU/FIDU for further information. While unconfirmed, there do seem to be a few examples of complete unsanitised SARs being placed on force intelligence systems. Once on FIB systems, these SARs may have been used without the knowledge (and associated feedback) of the initial SARs recipient. On the impact of the Elmer rollout: while having Elmer in FIBs will clearly increase SARs' contribution to force intelligence work, in the absence of truly interconnected IT systems, FIBs may still wish to somehow (e.g. subject names) load SARs onto FIB systems to allow for bulk searching and cross-checking.

Guidance/training/advice: LEAs receive only limited guidance from external sources on SARs processes and procedures. NCIS provides guidance on the confidentiality and sensitivity of SARs in both its training for the Elmer rollout and in work released through ACPO (this subject is of critical importance). ARA, which has the statutory responsibility under POCA for the training and accreditation of financial investigators, discusses SARs—though not in great detail—in its training courses for FIs (advanced courses, like the money laundering course, go into far greater depth). LEAs were asked about guidance; most reported that they received little or no guidance/training/advice. This seems to imply that existing NCIS/ACPO/ARA input is insufficient. A fair number of LEAs suggested that they would like more in-depth guidance on how to get the most out of SARs, including with turning confidential information into usable intelligence, data mining, best practice, and minimum work required. Several LEAs noted an obvious but oft-forgotten point that due to resource limitations, training must be very relevant to daily lives. Several LEAs expressed the desire for guidance to be handed down from ACPO and/or the Home Office on what exactly they should be doing with SARs and how SARs should be used. Additional comments received suggested that LEA staff were not sufficiently prepared for consent and all that that civil decision implies (though they now appear to have things under control).

Uses of SARs (Outcomes)

Of the 249,244 SARs received in 2003 and 2004, 101,567 (40.8 percent) were disseminated to the 49 primary LEA users for action. These include LEA-bound consents and SARs which have been copied to (i.e. sent to) more than one LEA, perhaps because it was unclear if a SAR related to one location or another, or one type of criminality or another. These exclude, however, SARs related to terrorism and various other sensitive issues; SARs destined for overseas jurisdictions; SARs sent out in bulk backlog-clearing exercises (like the 2003 KPMG recommendation to clear the 2002/2003 backlog of SARs by sending them to LEAs on CD-ROMs); and SARs sent to NCIS units other than SFI.[139] Of the 101,567 SARs disseminated to the 49 primary users in 2003-2004, some 72,375 SARs were original disseminations (71.3 percent of the 101,567—which represents some 29 percent of the SARs received by NCIS in 2004-2004), while 29,192 SARs were copied-to disseminations (29.7 percent of the 101,567—which represents some 12 percent of the SARs received by NCIS in 2003-2004; see Table 7.4, see also Table 7.3, page 148, for information on allocations and disseminations of SARs by LEA). The majority of copied-to disseminations were sent to HMCE, MPS, and Inland Revenue (representing some 55.3, 14.3, and 11.4 percent of 2003-2004 copied-to disseminations, respectively).

[139] CD-ROMs were sent to LEAs in the KMPG backlog-clearing exercise. Further, after the June 2004 reduction of nonconsent disseminations, three LEAs—Cheshire Constabulary, Merseyside Police, and the MPS—took NCIS up on its offer to send semi-regular CDs containing those nonconsent SARs relevant to LEAs (curiously, other LEAs did not request this of NCIS). SARs sent out in this manner were not included in the statistics provided to the author by NCIS on SARs disseminations. Ignoring these particular SARs might render certain calculations inaccurate. But there are mitigating factors which suggest that this is less of a worry—at least with calculations. Not all LEAs even opened the KPMG CD. Some did not for resource reasons, or were simply uninterested (sadly); others could not, reporting that the CDs were provided in a computing format that was incompatible with their systems. And on the subject of the CDs sent to the three LEAs after June 2004, it appears that some of the information was sent to these LEAs not in calendar year 2004, but in 2005. Along these lines, the number of total SARs disseminated to the 49 LEAs in 2003 is probably more on the order of 80,000-100,000 (some of which will have been 2002 SARs), with 40,000-45,000 SARs disseminated in 2004. Because this could not be validated, calculations involving total disseminations will slightly over- or under-estimate the true situation (depending on the type of calculation). This is only an issue with tables/figures specifically drawing on NCIS-provided disseminations, not the information from LEAs.

Table 7.4. Annual Receipts and Disseminations of SARs by NCIS to LEAs, 2003-2004

Variable	*2003*	*2004*	*Total*
SARs received by NCIS	94,708	154,536	249,244
SARs allocated to the 49 primary users	97,677	133,133	230,810
Total SARs disseminated to the 49 primary users	66,098	35,469	101,567
Original disseminations	45,129	27,246	72,375
Copied-to disseminations	20,969	8,223	29,192

Source: NCIS. Disseminations exclude SARs related to terrorism and various other sensitive issues; SARs destined for overseas jurisdictions; SARs sent out in bulk backlog-clearing exercises (see footnote 139); and SARs sent to NCIS units other than SFI. The figure for 2003 allocations is slightly larger than the 2003 SARs received by NCIS; NCIS theorises that this is due to backlogged SARs being entered since the 2003 receipt figure was published. The figure for 2004 allocations slightly under-represents the number allocated to the 49 primary users, likely because while recorded as received, a backlog of SARs had not been entered into the system (and could not thus be automatically allocated to an LEA). SARs allocated to the 49 LEAs should not equal SARs received, though; some SARs will "belong" to LEAs other than these 49.

Outcomes—Quantitative data: So how were the SARs used in the fight against crime? Quantitative and qualitative data are used to triangulate findings. So how were the disseminated SARs used by the LEAs? Several important caveats must be considered when interpreting these data. First of all, many LEAs provided little or no data, so the results do not represent the situation in its entirety; these figures clearly underestimate the true SARs-related outcomes. Critically, a number of LEAs providing no data on certain variables discussed examples of SARs-related successes of often considerable magnitude. A number of LEAs do appear to be doing good and often excellent work with SARs, at least according to one-off examples given to the author or anecdotal information and the perceptions of various respected people within the regime. Some examples are contained in Appendix 1; others are of interest but remain *sub judice* (and out of the public domain); and still others are of interest but relate to cases in which the use of one or more SARs has not been made public. Regardless, not all data points here come from the same LEAs. For example, an LEA may have stated that the number of nonconsent SARs received was not readily available, but may then have provided figures for the number of nonconsents launching a proactive investigation (perhaps because this was zero, and was thus easily knowable). Many LEAs provided information on seizures, but could not provide information on forfeitures (the same goes for prosecutions/convictions and for restraints/confiscations—though funds need not be restrained prior to confiscation). Internal consistency is sometimes lacking: for example, for several LEAs, the number

of consents granted plus consents refused does not add up to the number of consents received. On external consistency, some LEAs reported receiving more SARs than NCIS reported disseminating to them, though this is very likely explained by search requests and bulk disseminations. Data were not validated. In any case, figures received may not be representative of the broader population of all 49 LEAs.

Furthermore, as noted above, there are no perfect measures of outcomes (see pages 141-142). To reiterate, when interpreting the outcomes figures it is important to consider the following: uses of SARs are not mutually exclusive; many SARs together will be used to illustrate the pattern of offending of a lone individual; many SARs will be received relating to people already under investigation; and outcomes measures cannot illustrate the extent of the deterrent effect of the regime. No allowances have been made here for time: SARs disseminated in one period may be put to use several months or even years later. Because there is only limited understanding of the extent to which this occurs, it seems prudent to simply present/compare 2003 outcomes with 2003 disseminations and 2004 outcomes with 2004 disseminations.

What do these data imply when viewed in their totality, as in Table 7.5? The problem is that they may not imply much in this aggregate format—at least not in illustrating the attrition of SARs from receipt to outcomes—because so many different concepts contain data provided by different LEAs. Comparisons drawn here are suggestive of comparisons between apples and oranges (i.e. they're meaningless). The safest points to discuss may concern the amounts recovered through nonconsents and consents. There are still more responding LEAs on certain variables than others, but these data do seem to suggest that perhaps consent SARs are more efficient than nonconsents in terms of asset recovery. A number of LEAs currently hold a very favourable view of consents, and see them having the greatest impact. This should come as no surprise: consents represent current information on pending money movements. These LEAs discussed some high-profile uses of consents, some of which are not captured in the data. Of course, as with everything here, one or two spectacular cash seizures or confiscations can skew the results dramatically.

Table 7.5. Annual Nonconsent and Consent Outcomes, 2003-2004

	2003			*2004*		
Variable	*N*	*Sum*	*Mean*	*N*	*Sum*	*Mean*
Nonconsent SARs						
Number of nonconsent SARs **received**	31	36,372	1,173.3	36	32,567	904.6
Number of nonconsents undergoing **initial checks**	30	19,414	647.1	32	20,155	629.8
No. of nonconsents **investigated beyond initial checks**	17	7,951	467.7	22	8,855	402.5
No. of nonconsents **launching a proactive investigation**	16	297	18.6	18	774	43.0
No. of nonensnts **relating to an existing recorded crime**	10	29	2.9	14	402	28.7
No. of nonconsents **resulting in a crime being recorded**	10	26	2.6	13	31	2.4
Number of nonconsents contributing to a **prosecution**	13	57	4.4	18	229	12.7
Number of nonconsents contributing to a **conviction**	13	26	2.0	15	28	1.9
Number of nonconsents contributing to a **cash seizure**	18	33	1.8	21	32	1.5
Number of nonconsents contributing to a **cash forfeiture**	17	30	1.8	19	26	1.4
Number of nonconsents contributing to a **restraint**	15	29	1.9	19	31	1.6
Number of nonconsents contributing to a **confiscation**	13	28	2.2	15	30	2.0
Amount of cash **seized** through nonconsents (GBP)	18	£435,445	£24,191	19	£106,145	£5,587
Amount of cash **forfeited** through nonconsents (GBP)	17	£215,145	£12,656	18	£28,145	£1,564
Amounts **restrained** through nonconsents (GBP)	14	£4,760,000	£340,000	16	£4,561,000	£285,063
Amounts **confiscated** through nonconsents (GBP)	13	£182,000	£14,000	14	£-	£-
Consents SARs						
Number of consent SARs **received**	24	3,457	144.0	33	4,854	147.1
Number of consents **granted**	21	2,162	103.0	29	3,467	119.6
Number of consents **refused**	23	84	3.7	32	416	13.0
Number of consents contributing to a **prosecution**	18	1	0.1	26	16	0.6
Number of consents contributing to a **conviction**	16	-	-	24	8	0.3
Number of consents contributing to a **cash seizure**	16	3	0.2	26	17	0.7
Number of consents contributing to a **cash forfeiture**	16	3	0.2	23	2	0.1
Number of consents contributing to a **restraint**	16	4	0.3	23	26	1.1
Number of consents contributing to a **confiscation**	16	1	0.1	20	6	0.3
Amount of cash **seized** through consents (GBP)	18	£5,931,247	£329,514	24	£1,734,586	£72,274
Amount of cash **forfeited** through consents (GBP)	16	£20,000	£1,250	19	£30,000	£1,579
Amounts **restrained** through consents (GBP)	18	£4,690,000	£260,556	22	£15,575,900	£707,995
Amounts **confiscated** through consents (GBP)	16	£35,000	£2,188	22	£4,808,801	£218,582

Source: Survey of LEAs. The N columns provide variable-specific numbers of respondents (out of 49 total respondents). ***Figures should be interpreted with great care: not all LEAs provided quantitative data, and not all data points come from the same LEAs.*** *For example, an LEA may have stated that the* number of nonconsent SARs received *was not readily available, but may then have provided figures for the* number of nonconsents launching a proactive investigation *(perhaps because this was zero, and was thus easily knowable). Moreover, many LEAs provided information on seizures, but could not provide information on forfeitures (the same goes for prosecutions/convictions and for restraints/confiscations—though funds need not be restrained prior to confiscation). Fewer concepts were recorded with consents, as they are generally regarded as more quick-and-dirty than nonconsents and are often treated somewhat differently. Lastly, the Inland Revenue has powers others do not, including Hansard valuations and Avoidance (fraud work opened under IR code of Practice 8); these are not captured above, though SARs contribute to such work. Data were not validated.*

Things become somewhat clearer and less tentative, however, when looking only at those LEAs who provided data for all of the major concepts (allowing like-with-like comparisons, notably those relating to receipts and outcomes). These findings may certainly not be representative of the broader population of 49 LEAs, but at least the contribution of SARs to various outcomes can more or less be followed. Unfortunately, only seven LEAs—all smaller territorial police forces from England & Wales—provided data on all of the outcomes captured in the survey. Further, there is some evidence of double counting within recovery figures, which could not be confirmed. Total values for concepts like number of SARs relating to a prosecution and/or cash seizure and/or restraint (for nonconsents + consents) are very low (at six, zero, and two, respectively, all from 845 SARs received; not shown).

Along these analytical lines, Table 7.6 presents information on nonconsent investigative processes for the 14 LEAs (comprising territorial police and two national LEAs) who provide figures for all of the relevant variables (though this is not to suggest that a one-by-one approach to SARs development is the best use of resources; there is indeed a place for deeper information interrogation). While likely not necessarily representative of the larger population of the 49 LEAs, it is interesting to follow the attrition of SARs through the process. The vast majority of SARs appear to undergo initial checks (i.e. information evaluation). A smaller percentage of the SARs received is investigated beyond initial checks (i.e. intelligence development). And a considerably smaller percentage of SARs received launch a proactive investigation (though this has nothing to do with those SARs relating to ongoing investigations). These percentages are captured in two different ways: in aggregate percentages (such that nonconsent SARs undergoing initial checks as a percentage of SARs received in the overall column equals 10,794/12,016; and in the LEA mean column, the percentage is first calculated by LEA, and then the mean percentage is taken). Either way, and bearing in mind all of the caveats on information interpretation, nonconsent SARs launching a proactive investigation as a percentage of nonconsents received seems fairly low. This should come as no surprise: many LEAs appear to only work-up SARs relating to ongoing investigations, so few resources seem to be used in developing proactive cases.

Table 6. Annual Nonconsent Investigative Processes for 14 LEAs, 2004

Variable	*Number of SARs (Total for the 14 LEAs)*	*As a percentage of SARs received (overall)*	*As a percentage of SARs received (LEA mean)*
Nonconsent SARs allocated	27,185		
Nonconsent SARs disseminated	12,788		
Nonconsent SARs received	12,016	100.0%	100.0%
Nonconsent SARs undergoing initial checks	10,794	89.8%	92.0%
Nonconsents investigated beyond initial checks	8,030	66.8%	25.7%
Nonconsents launching a proactive investigation	763	6.3%	6.7%

Sources: NCIS (for allocations and disseminations); and survey of LEAs. N=14 LEAs (who provide figures for all of the data points). The 14 LEAs include territorial police and two national LEAs. Nonconsent SARs undergoing initial checks as a percentage of SARs received in the overall *column is computed as 10,794/12,016; and in the* LEA mean *column, the percentage is first calculated by LEA, and then the mean percentage is taken.*

A separate analysis was undertaken to explore the percentage of overall 2004 cash seizures and confiscations which relate to SARs, as reported by 12 and 11 LEAs (all territorial police forces) responding to cash seizure and confiscation queries, respectively (see Table 7.7). Again, these findings may in no way be generalisable to the broader population of 49 LEAs. On average, 1.6 percent of cash seizures and 3.5 percent of confiscations appear to be SARs-related, at least for these 12 and 11 LEAs. The maximum percentages are 11.5 percent and 38.6 percent for SARs-related cash seizures and confiscations, respectively. Perhaps these are more indicative of the levels that could be expected with more zealous use of SARs. Two data points were excluded from the cash seizure and confiscation comparisons (one from each), as they related to SARs-related activity of greater than 100 percent—an impossibility. Note that 2004 confiscation data are for the 2004/05 fiscal year; these data are used as proxies for the calendar year data. Further, only 10 months of data have been used (April 2004-January 2005). The point is not to establish exactly the percentage of each relating to SARs, but rather just to get an indication of the scale.

Table 7.7. Annual SARs-Related Cash Seizures and Confiscations as a Percentage of Cash Seizures and Confiscations, 2004

Variable	*N (LEAs)*	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
SARs-related cash seizures as a percentage of cash seizures by LEA	12	0.0%	11.5%	1.63%	3.5048
SARs-related confiscations as a percentage of confiscations by LEA	11	0.0%	38.6%	3.51%	11.6529

Sources: Survey of LEAs; and JARD (provided by the Home Office). Overall cash seizure data relate only to LEAs in England & Wales. Overall confiscation data relate to LEAs in England & Wales and PSNI. Confiscation data are for the 2004/05 fiscal year, and include only April 2004-January 2005); they are used as a proxy for the 2004 calendar year data. The LEAs include territorial police.

That so few LEAs provided data on certain specific concepts certainly implies that more than half of the LEAs are not represented in much of the debate. It is very possible that these LEAs would change the thrust of the story—and some LEAs appear to be doing good work with SARs. But bearing in mind the limitations on data interpretation, some tentative conclusions may be drawn. The over-arching and unsurprising conclusion is that for those few LEAs providing data, SARs appear to be considerably under-utilised. SARs deter some money laundering—but it is not the case that all offenders engaging in money laundering activity are or will ever be completely deterred by the SARs regime. As such, SARs should indeed lead to criminal justice outcomes. It is likely difficult to know good performance when one sees it: there is a theoretical maximum on the number/percentage of SARs contributing to X or Y criminal justice outcome, of course, because many SARs will relate to innocent people, many to people not worth pursuing, and many to the same individuals (who may fall in the innocent/not worth it categories). So it may be the case that excellent performance on, say, SARs launching proactive investigations as a percentage of SARs received is 40 or 50 percent or even (far) less. But that doesn't imply that it should be too difficult to know weak performance when one sees it. And look: for the 14 LEAs providing data (from Table 7.6), nonconsent SARs launching a proactive investigation represent only some six or seven percent of nonconsents received? For the 11 LEAs providing data (from Table 7.7), the mean percentage of SARs-related confiscations as a percentage of confiscations by LEAs is 3.5 percent? For the 26 LEAs providing 2004 data (from Table 7.5), only 17 consent SARs contributed to a cash seizure? For the 15 LEAs providing 2004 data (again from

Table 5), only 30 nonconsent SARs contributed to a confiscation? Even bearing in mind all of the relevant caveats, these figures seem suboptimal.

Of course, it could be the case that the SARs examined by the handful of LEAs providing data (and specifically for those providing data for Tables 7.6 and 7.7) showed little promise. That is, perhaps it's not that SARs were under-utilised, but rather that the SARs were largely unrelated to crime. But analyses of SARs targeting by the reporting sector suggest otherwise (see the previous chapter and Fleming, 2005).

Outcomes—Qualitative data: The outcomes data provided to varying degrees by the 49 LEAs are incomplete, of course, so on this basis alone it isn't appropriate to claim that SARs are broadly under-utilised by LEAs nationwide. But the LEAs themselves concur: by their own admission, 38 of the 49 LEAs—more than 77 percent—stated that SARs were under-utilised in their unit. Of those stating that the utilisation of SARs in their unit was just right, several suggested that this was because any increase in SARs-related work would strain resources too tightly (and that resources were already under pressure). The fact that SARs are under-utilised was further confirmed by conversations with knowledgeable members of the law enforcement community and in site visits (not to imply that all site visit participants are under-performing).

The question then becomes why: why are SARs under-utilised by LEAs? LEAs were asked if the uses to which SARs were put—and thus outcomes—were limited in their units by various factors. Only two LEAs suggested here that the uses to which SARs were put were not limited at all (in contrast to the twenty-something percent of LEAs saying that SARs use was just right in the preceding question). Of the remaining 47 units, nearly 90 percent reported that the uses to which SARs were put were constrained by resource limitations in their unit. Rarely will organisations forego the opportunity to ask for more resources when given it. In this case such claims appear appropriate. A large number of comments received suggested that limitations on SARs-development resources prevented LEAs from working up targets unless they were known nominals. Several LEAs reported that all they could do was search for SARs relating to existing investigations—and that SARs just weren't getting the attention they deserved. Some LEAs rationally noted that they found it

difficult to justify allocating scarce resources on the back of only one piece of information. This is not to argue for a massive increase in SARs-related resources for each LEA. One of the responding LEAs probably gets it right with the following statement:

> It's all a matter of degree. Unlimited additional resources would maximise their potential but we need to concentrate on improving things first. How about better systems and a moderate increase in resources, matched by a realisation that judicious selection of a significant SAR, followed by adequate attention to and interest in it might actually create a worthwhile result.

LEAs went on to cite further reasons why the uses to which SARs were put were limited. These included: difficulties in selling SARs-based jobs to operational teams (32 percent); no clear suspicion contained in SARs (32 percent); IT systems in their units (19 percent); the fact that LEAs were getting fewer nonconsent SARs from NCIS since June 2004 (15 percent); and the fact that SARs upon receipt were several months old (9 percent). These were not mutually exclusive, such that LEAs could select any of the reasons that applied to them (the latter two were identified by the LEAs in open-text fields).

It's no secret that LEAs seem to work on things that are measured, and ignore things that are not. No performance indicators of any value on SARs were identified anywhere. Some LEAs noted that they monitor SARs received from NCIS, though it is hard to imagine that this is useful for anything other than a work-load barometer (as opposed to a true performance monitor). Uses might be increased with appropriate performance indicators.

Finally, LEAs were asked for recommendations on improving the use and management of SARs. Their comments all reinforced thoughts set out above and discussed over the many preceding pages. LEAs suggested that sufficient resources be devoted to SARs; better IT solutions for case management and SARs analysis (including data mining tools and perhaps national IT solutions for the handling of intelligence); and full access to timely SARs from NCIS. LEAs also noted the need for LEA managers to continue to work toward the mainstreaming of POCA and financial investigation. And lastly, LEAs called for more education/training of the

regulated sector, to ensure that little noise accompanied the SARs signal (i.e. to ensure that only SARs based on true suspicion were filed, not defensive or misguided reports).

NCIS uses of SARs: After years spent primarily inputting, processing/analysing, and disseminating SARs, NCIS SFI has entered the intelligence-development arena. SARs are used to generate or contribute to various tactical and strategic intelligence products within SFI.[140] While some are self-tasked, most SFI products are driven by national strategies—as set forth in the NCIS Service Plan—established by the Concerted Inter-Agency Criminal Finances Action Group (CICFA), the Concerted Inter-Agency Drugs Action Group (CIDA), the REFLEX Group (on illegal immigration and human trafficking), and the national firearms strategy. Current SFI work products range from problem profiles to current intelligence assessments (CIAs) to baseline assessments to target/nominal profiles, all of which contribute to the store of knowledge on money laundering.[141] While sensitive (products cannot be discussed in detail here), such products may examine how particular sectors are used to launder criminal proceeds, may identify emerging trends, and may suggest targets for tactical activity. Products are generally sent to FIBs and FIUs, though distribution lists are not fixed. Many of these products are sanitised and forwarded to industry. SFI also uses SARs to support Operation Payback initiatives in various regions, primarily with quick-and-dirty (yet useful) target lists and subject-of-interest lists. SARs are used in strategic research on various aspects of the regime (one such project focuses on consent SARS and their efficacy). Perhaps most interesting of all is some tactical work SFI is running on some significant targets. This type of work often involves 20-40 suspects in criminal networks, with sometimes hundreds or even thousands of SARs (informed by other

[140] SARs are disseminated to NCIS units outside SFI; according to SFI, more than 34,000 SARs were disseminated to non-SFI units in 2003-2004 (of which some 800+ represent original disseminations, with the rest as copied-to disseminations). This research did not contact non-SFI units to explore how these SARs were used.

[141] *Problem profiles* identify specific areas or issues requiring operational attention or policy development; *current intelligence assessments* describe newly identified traits in criminal activity or assessments of current impacts against previously identified areas; *target profiles* identify specific individuals or entities for law enforcement attention; and *baseline assessments* capture baseline information on identified issues (NCIS, no date).

sources of intelligence, of course).[142] Lastly, SFI plays a significant role in international work, through foreign financial intelligence unit requests for information, with the FATF, and in representing the UK in the Egmont Group. SARs may contribute to these international responsibilities.

A relevant question is this: are LEAs using the tactical and strategic products drafted by NCIS? LEAs were asked if they received such products and if they prioritised them. Most LEAs reported that they had received few if any SARs-based products from NCIS (the LEAs who did receive such products suggested that these were indeed prioritised in some way). To some extent this is a distribution issue: many such intelligence products will be released on a need-to-know basis. The majority of the products relate to national serious organised crime priorities, which will have little to do with most territorial LEAs. That said, those certain products intended for wider distribution to improve LEAs' AML capabilities do not appear to be getting to the troops in the trenches. Some LEAs felt this might be due to their own managers who received the products but did little with them. A general vibe was put out by many of the LEAs, though one perhaps biased by pre-existing enmity towards NCIS, that NCIS was/is answering questions nobody asked with its intelligence products (though the majority of these do seem to have been tasked by CICFA). If nothing else, this does all seem to be suggestive of the need for better communication between NCIS and LEAs.

Feedback from LEAs to NCIS/Industry

Feedback from LEAs to NCIS: NCIS maintains systems and protocols for receiving SARs-specific feedback from LEAs. Disseminated SARs are each accompanied by a feedback form through which LEAs can provide information on the usefulness of the SAR and the purpose, if any, to which it was put. The form also provides the opportunity to supply details of any outcomes and to pass on anything learned from the use of the SAR (e.g. modus operandi of the offender) for potential

[142] The number of SARs used in intelligence products represents an interesting piece of management information which begins to shed some light on the use made of SARs. Unfortunately, NCIS keeps no record of the number of SARs used in the drafting of its products. Excluding the tactical work based on the many hundreds of SARs, most products appear to be based on limited numbers of SARs. Intelligence products do, of course, also draw from other NCIS databases/products and open-source information.

use in typologies. Information captured in the SAR feedback form is described in Table 7.8. Notable in the design of this form is that despite its depth (and perhaps over-zealous length), several important concepts are lacking, and there is an incomplete overlap with those concepts called for by the FATF (e.g. there is no mention of restraint/confiscation). Also, there is no easy way to capture the fact that the SAR in question links to previous SARs in some manner (NCIS will no longer capture links to previous SARs with the Elmer rollout, as LEAs will be able to conduct searches yielding this information). LEAs are encouraged to send feedback forms back to NCIS electronically (via the money.web extranet or secure email), though hardcopy feedback is accepted. Additional short forms are used for consent SARs: Document A records the consent decision (along with the reasoning behind the approval or denial of consent); Document B is completed by LEAs only in the case that consent is denied, and after 31 days have passed, describing the details of the investigation and any subsequent court orders applied for.

Table 7.8. SAR Feedback Form

Section/question	*Answer choices*
1. Initial assessment. Please select one of the following	Suitable (go to section 2) After evaluation deemed unsuitable (go to section 8) Insufficient data supplied (go to section 8) Requires allocation to another force area (go to section 8)
2. Source contacted. Disclosing institution has been contacted	[Check box]
3. Current status. Please select one of the following	Awaiting evaluation (no action initiated) Under active investigation or evaluation Complete (enter results in part 4)
4. Result/current progress. Please select at least one of the following	Disclosed transactions identified as proceeds of crime Other proceeds of crime identified as a result of investigation or evaluation Direct arrest (please give details in section 8) Assist arrest—other persons arrested (please give details in section 8) Realisable assets identified and value of assets No connection to crime at this time but still suspicious Funds not linked to criminality (please give details in sect. 8) Cannot progress because confidentiality will be broken Linked to an ongoing enquiry
5. Final assessment. Please select one of the following	Existing intelligence enhanced (info on local database supplemented) New intelligence (new record created on local database—no existing current record) After evaluation suggested reallocation to another government department (please specify a more appropriate investigator in sect. 8) Charged/summoned Convicted
6. Modus operandi	[Open-ended answer field]
7. Relevant investigation material. New nominals, companies, transactions, addresses or information records added by search request	[Check box]
8. Comments. Please include intelligence evaluation where appropriate	[Open-ended answer field]

Source: NCIS. This form is to be completed for all SARs; two additional short forms should be filled out for consent SARs.

Neither incentives nor sanctions are used to persuade LEAs to send feedback. NCIS staff suggested that there were no specific guidelines for LEAs regarding feedback provision, at least that they were aware of. LEAs are strongly encouraged to provide feedback to NCIS and reminders are given in various fora, such as the quarterly meeting of the national FIWG or through occasional visits by the SFI Collections team. The system was historically set up to chase feedback from LEAs at various intervals (via periodic emails); this facility has not been used for several years, as LEAs found it to be a cause of consternation as opposed to a useful reminder.

NCIS received 29,135 feedback forms from the 49 primary LEAs in 2003-2004, representing some 28.7 percent of the 101,567 SARs disseminated to these LEAs in the same period.[143] This is 40.3 percent of the 72,375 original disseminations (it is unclear whether the query providing feedback information captured feedback on the same SAR (perhaps filed by two organisations looking at the original and copied-to SARs). Also, it may be most appropriate to view feedback forms with a lag (viewing April forms received as a percentage of January SARs, for example), though this makes little difference to the 2003-2004 aggregate percentage (April 2003-December 2004). Moreover, the pattern of feedback received seems to track disseminations in the same month (suggesting to some extent that substance of the feedback will likely contain little on outcomes). Interestingly, despite suggestions to the contrary, a good number of LEAs provide feedback on a regular basis; 14 of the 49 LEAs provided feedback on more than 50 percent of the SARs disseminated to them in 2004. LEAs also almost universally supplied Document A recording the consent decision of all consents disseminated; 49 Document B forms were received between January and December 2004 (NCIS did not maintain this information prior to January 2004). Bearing in mind that Document B forms are only supplied to NCIS when consent is denied, a small number of Document B receipts was to be expected (though this figure of 49 forms does appear suboptimal). Feedback figures are presented in Table 7.9.

[143] The SARs disseminated to the 49 LEAs is likely an underestimate because it doesn't include bulk disseminations. See footnote 139 for more information.

Table 7.9. Annual Feedback Sent from LEAs to NCIS, 2003-2004

Variable	*2003*	*2004*	*Total*
Feedback forms received by NCIS	18,849	10,286	29,135
Total SARs disseminated to the 49 primary users	66,098	35,469	101,567
Feedback as a percentage of these total disseminations	28.5%	29.0%	28.7%
Original SARs disseminated to the 49 primary users	45,129	27,246	72,375
Feedback as a percentage of these original disseminations	41.8%	37.8%	40.3%

Source: NCIS. Disseminated SARs exclude SARs related to terrorism and various other sensitive issues; SARs destined for overseas jurisdictions; SARs sent out in bulk backlog-clearing exercises (see footnote 139); and SARs sent to NCIS units other than SFI. Total SARs includes original disseminations plus copied-to disseminations.

Disappointingly, NCIS seems to have done little with LEA feedback since end-2002/early-2003. NCIS states that feedback received may be used in the drafting of intelligence products/typologies which are disseminated to LEAs and occasionally to industry (often via money.web). But the use of feedback for intelligence products is an ad hoc use, and comments received indicate that feedback may play only a limited role in this regard. No systematic analyses based solely on feedback appear to have been carried out to understand the larger picture, at least not in the past few years. After all, feedback provides useful management information on the use of SARs (a count of feedback received might imply on its own that those SARs were looked at in some way—up to 40 percent of the original disseminations in this case) and their pros and cons. To be fair, feedback received is not always informative, and may say nothing more than "under active investigation or evaluation", an extremely broad category. A cynical view is that LEAs are just providing meaningless feedback to cover their backs (so as to suggest that SARs are being used, when they're not). Since NCIS appears to have carried out little systematic analysis on the feedback received, however, it is not possible to confirm or deny the cynicism. That no systematic analyses have been carried out likely affects the future provision of feedback by LEAs (who might think "if nothing is ever done with information provided, why provide it in the first place?"). More importantly, such systematic analyses repeated at regular (e.g. quarterly) intervals could provide evidence of the use—or not—of SARs by LEAs; if SARs appear to be under-utilised, LEA managers could take immediate steps to improve LEA performance.

The System in Flux

Finally, the SARs regime is in a state of flux, and has been for some time now. This is largely the result of actions taken by NCIS to improve the functioning of the regime in the long-run. Some factors are worth noting in passing, as they may have had an impact (and may continue to have an impact) on LEA use and management of SARs.

NCIS: The Elmer rollout: The rollout of the Elmer database on 27 May 2005 is the most positive change within NCIS and the SARs regime. The Elmer rollout will fundamentally change the way LEAs deal with SARs, as the rollout will put access to nearly live data at LEA fingertips. Phase II of the rollout (to be delivered in early 2006) should bring advanced data mining capabilities and numerous other significant enhancements to the system. These include the ability to send automatic notification of SARs received on selected criteria to relevant LEAs and NCIS/SOCA internally, the ability to bulk download SARs, and enhanced searching on free text data. It seems reasonable that LEAs will be able to launch more proactive investigations with such "young" SARs. And LEAs will be in a position to carry out far more advanced analytical work than at present, at least if they're trained on the system enhancements. But it also places the onus on the use of SARs squarely on LEA shoulders. The SARs-related workload, at least with regard to information evaluation, for each LEA may become overwhelming, as 1) all SARs will be available for viewing by LEAs (save for those related to certain sensitive issues); 2) NCIS will not highlight links to previous SARs; and 3) LEAs will be responsible for all of the various relevant database searches in information evaluation/intelligence development. Resource constraints may prevent certain LEAs from evaluating all of the SARs within their remit/territory. To illustrate, using 2004 as a guide, Table 7.10, below, presents SARs allocated to each LEA, the LEA percentage of the total number of SARs allocated, the number of SARs allocated per workday (assuming 250 workdays per year), and the number of SARs disseminated per workday. Given comments received on resource constraints with the current SARs workload (which hitherto has been disseminations, not total allocations—which Elmer will emulate), it seems likely that LEAs will feel even more burdened than in the past. Critically, LEAs—particularly the MPS—will need to devise ways to find those SARs which represent a priority. There is most certainly a call for the automation of at least some

initial information evaluation, including introducing features within Elmer highlighting links to previous SARs. The one-by-one manual evaluation of SARs upon receipt may forcibly become a thing of the past. This is not necessarily an undesirable development, but there will clearly be a need for tools which enable the efficient and effective electronic evaluation of SARs (e.g. keyword searching/advanced data mining). Phase II of the rollout will hopefully assist in this regard. Further, because fewer nonconsent SARs have been disseminated by NCIS since June 2004, LEAs will be facing something akin to a full year's "backlog" of SARs when the database is rolled out. Should these be evaluated (at least in the sense that they're actively looked at one-by-one—they will obviously be very useful in searches of the system and other database interrogation)?[144] Regarding feedback, with the rollout of Elmer, LEAs will be able to easily provide feedback directly to NCIS by pointing-and-clicking their way through an online version of the feedback form. This does not, however, obviate the need for some sort of incentives to greatly increase LEA buy-in to the feedback process. In fact, NCIS will be in a position to monitor use of Elmer, both as an indicator of the use of SARs, and as a means of encouraging LEAs to make regular use of the database (under-performance could be reported to ACPO/LEA managers, who could thus encourage improvements as necessary). Also, should access to Elmer be granted to both FIUs and FIBs (FIBs being the ACPO proposal), there will need to be clear guidelines on which unit will do what, so as to prevent a waste of scarce resources. Regardless of the FIU/FIB decision, LEAs will need to buy into the flagging/ownership of SARs, to prevent wasteful "blue-on-blue" duplication of efforts. Given the paradigm shift in dealing with SARs represented by the rollout of Elmer, there is a strong call for a future review of the regime (including on outcomes), after at least a year of Elmer access by LEAs. The LEA aspects of the regime will clearly undergo considerable change in that time, very likely for the better.

[144] There is some anecdotal evidence suggesting that LEAs appear to be under the impression that they will be expected to work through the "backlog".

Table 7.10. Annual SARs and Workloads by LEA, 2004

LEA	*2004 SARs allocated*	*LEA percentage of total allocated*	*2004 SARs allocated per workday (estimated)*	*2004 SARs disseminated per workday (estimated)*
Avon & Somerset Constabulary	1,867	1.4%	7.5	0.8
Bedfordshire Police	1,389	1.0%	5.6	0.5
Cambridgeshire Constabulary	1,159	0.9%	4.6	0.7
Cheshire Constabulary	1,279	1.0%	5.1	0.6
City of London Police	695	0.5%	2.8	1.1
Cleveland Police	595	0.4%	2.4	0.3
Cumbria Constabulary	392	0.3%	1.6	0.3
Derbyshire Constabulary	1,043	0.8%	4.2	0.4
Devon & Cornwall Constabulary	1,597	1.2%	6.4	0.6
Dorset Police	1,202	0.9%	4.8	0.4
Durham Constabulary	510	0.4%	2.0	0.4
DWP	889	0.7%	3.6	4.6
Dyfed Powys Police	650	0.5%	2.6	0.3
Essex Police	2,145	1.6%	8.6	0.9
Gloucestershire Constabulary	582	0.4%	2.3	0.3
Greater Manchester Police	5,050	3.8%	20.2	2.1
Gwent Police	586	0.4%	2.3	0.3
Hampshire Constabulary	2,156	1.6%	8.6	0.8
Hertfordshire Constabulary	1,632	1.2%	6.5	0.6
HMCE	6,398	4.8%	25.6	42.3
Humberside Police	968	0.7%	3.9	0.4
Inland Revenue	9,126	6.9%	36.5	38.6
Kent Police	2,042	1.5%	8.2	1.1
Lancashire Constabulary	2,756	2.1%	11.0	1.2
Leicestershire Constabulary	1,681	1.3%	6.7	0.8
Lincolnshire Police	643	0.5%	2.6	0.5
Merseyside Police	1,789	1.3%	7.2	1.0
Metropolitan Police Service	39,150	29.4%	156.6	15.4
NCS	372	0.3%	1.5	1.5
Norfolk Constabulary	925	0.7%	3.7	0.5
North Wales Police	680	0.5%	2.7	0.2
North Yorkshire Police	627	0.5%	2.5	0.5
Northamptonshire Police	844	0.6%	3.4	0.4
Northumbria Police	1,545	1.2%	6.2	0.6
Nottinghamshire Police	1,519	1.1%	6.1	0.6
PSNI	4,125	3.1%	16.5	5.9
SDEA	4,472	3.4%	17.9	3.0
South Wales Police	1,311	1.0%	5.2	0.7
South Yorkshire Police	1,809	1.4%	7.2	1.0
Staffordshire Police	1,287	1.0%	5.1	0.6
Suffolk Constabulary	732	0.5%	2.9	0.4
Surrey Police	3,151	2.4%	12.6	1.1
Sussex Police	2,223	1.7%	8.9	0.9
Thames Valley Police	4,666	3.5%	18.7	1.3
Warwickshire Police	548	0.4%	2.2	0.2
West Mercia Constabulary	1,653	1.2%	6.6	0.7
West Midlands Police	5,985	4.5%	23.9	2.7
West Yorkshire Police	3,709	2.8%	14.8	1.6
Wiltshire Constabulary	979	0.7%	3.9	0.3

Source: NCIS (for allocations and disseminations). 2004 disseminations, on which the 2004 SARs disseminated per workday *column is based, are total disseminations (i.e. original + copied-to disseminations). The* allocated/ disseminated per workday (estimated) *columns assume 250 workdays per year. SARs allocated/disseminated directly to various Scottish forces have been included with the SDEA figures.*

NCIS: The June 2004 reduction of nonconsent disseminations: In contrast to the positive direction of the Elmer rollout is the unilateral decision taken by NCIS to significantly reduce the dissemination of nonconsent SARs after June 2004 (see page 129 for more detail on the change in procedures). And the issue is not historical in nature: with the Elmer database rolled out, LEAs will need to consider what to do with previously unseen nonconsents (these will be useful in searches and other analytical work based on information interrogation, but should these SARs be evaluated one-by-one, as queried above?). Regardless, there are three issues here: the implications of the June 2004 decision for non-national LEAs (i.e. territorial forces in England & Wales and Northern Ireland, as well as the SDEA, as the point of contact for Scottish forces); the NCIS Service Plan and the aims of the regime; and the manner in which the decision was taken (which relates to ownership of the regime).

The main implication of the June 2004 reduction is that few nonconsent SARs have been disseminated to and thus evaluated by local law enforcement in almost a year. This would not have been worthy of comment had the Elmer rollout taken place in early autumn 2004 as originally planned. But it did not. As such, according to data provided by NCIS, between July 2004 and April 2005, some 135,633 SARs were received and 15,574 were disseminated; more than 90 percent of these will be nonconsents (see Figure 7.3, page 181). By these counts, 120,059 SARs have not been seen by LEAs since June 2004, though in actual fact this is an overstatement of the problem. These figures do not take into account the semi-regular bulk CD-based disseminations to Cheshire Constabulary, Merseyside Police, and the MPS. These may represent some 20,000-30,000 nonconsent SARs. So perhaps between 90,000-100,000 SARs will not have been seen by local law enforcement (not all SARs were disseminated to LEAs before the June 2004 reduction, so while this represents a significant change, it is not entirely unprecedented). While these SARs will indeed have undergone considerable keyword and other searches/analyses at NCIS, these searches and analyses have been focussed on national priorities as set forth in the NCIS Service Plan. NCIS will generally not have employed keywords relating to local targets (i.e. local force priorities, Level One and perhaps Level Two in the NIM). So the concern is that those un-disseminated SARs may hold some important local intelligence which could have prevented crime or at least assisted in its

enforcement after-the-fact (though many SARs might be of limited or no value, or relevant only to national issues).

To be fair, the present chapter has highlighted the fact that LEAs were broadly under-utilising SARs; more would not necessarily have improved things (the reduction in nonconsent disseminations may have insulated certain LEAs from criticism). Many LEAs had indicated to NCIS in an internal research effort of the SFI Collections Unit that they were happy to let NCIS filter SARs (i.e. they were happy not to receive all SARs). Actually, filtering was originally recommended by KPMG because LEAs couldn't cope with the volume of SARs they were receiving—but then NCIS was doing at least initial evaluations/examinations of the SARs. And NCIS has suggested that it chose to significantly reduce nonconsent disseminations because LEAs were doing little with the SARs in the first place. Even after June 2004, many LEAs seemed either blissfully unaware that very few nonconsent SARs were coming their way, or knew but didn't object (both discouraging thoughts). Conversations with LEAs suggest that some did welcome the slowdown because they viewed dealing with SARs as competing with other priorities like confiscation and cash seizure. NCIS did provide the LEAs with various workarounds (these were supposed to be temporary, as the Elmer rollout was initially scheduled for early autumn 2004). These include: LEAs were invited to come to NCIS to use Elmer onsite; LEAs could have filed search requests; NCIS was sending out various subject-of-interest and target lists, all based on SARs; and timely and actionable consent SARs were still being disseminated.

But comments received in the course of this research suggest that some LEAs found the workarounds unsuitable (and many of these LEAs represent the larger consumers of SARs). In contrast with those LEAs happy to let NCIS filter SARs, some LEAs wanted to see all of the SARs of relevance to them—and this was told to NCIS before the reduction. And not all LEAs were doing little with their SARs; some LEAs appear to have been using SARs to a sufficient and sufficiently interesting extent. A small number of LEAs who might have been underperforming had actually hired staff specifically to deal with SARs, only to find the tap more or less turned off. Moreover, that LEAs were doing little with their SARs seems to be an issue for NCIS to sort out in conjunction with LEA ringmasters at ACPO and the Home Office, not

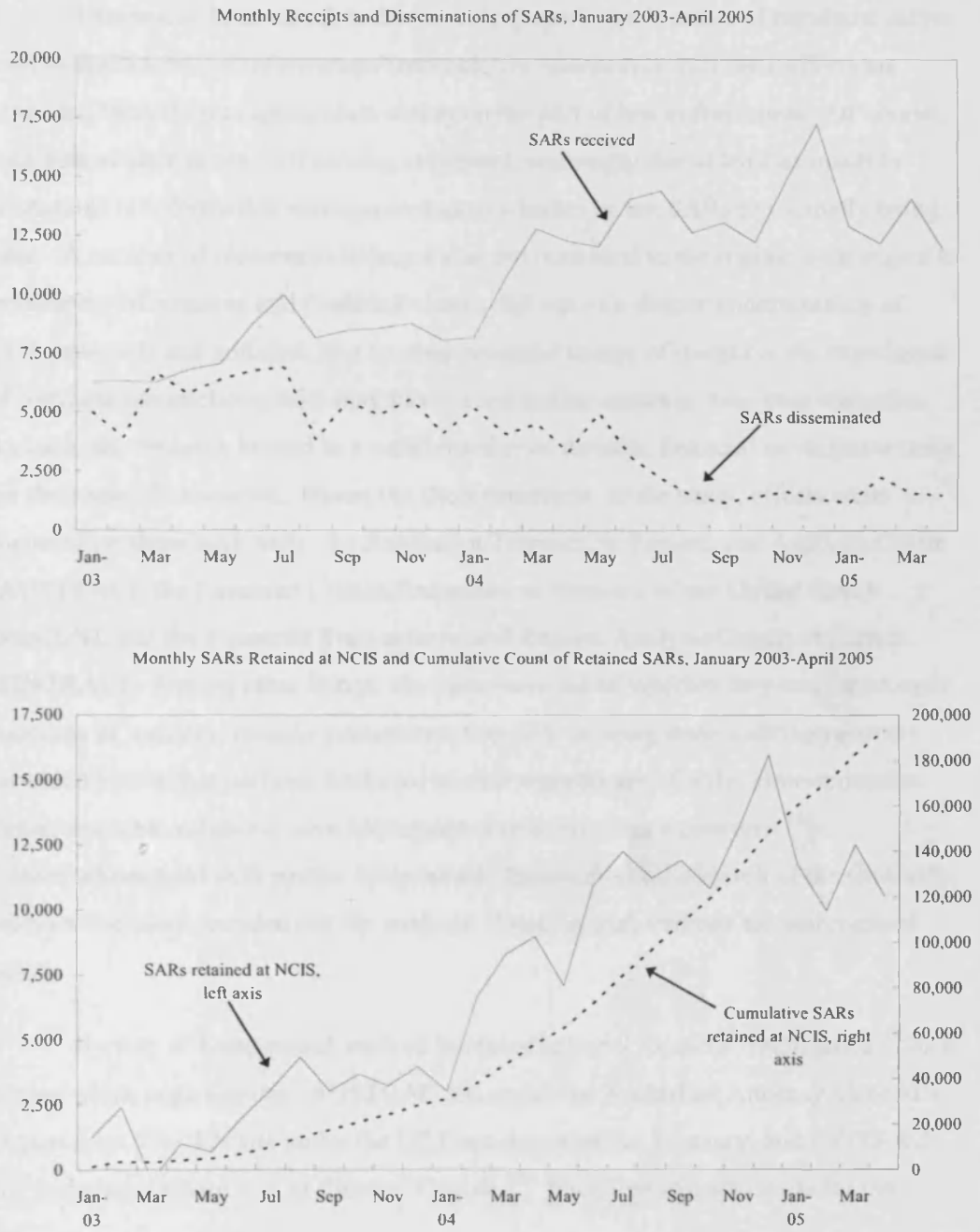
unilaterally. On the work-arounds, very few LEAs seemed to be pleased with the offer to visit NCIS to use the data. LEAs could have filed search requests, but the process is commonly recognised as inefficient and slow (ironically, the results of search requests come through the system as SARs, so an LEA might receive a SAR saying that NCIS has no information to provide for a previously lodged search request). Further, there is some anecdotal evidence that NCIS was somewhat reluctant to conduct vast numbers of search requests to compensate for the lack of nonconsent SARs. After all, it seems that the decision to limit dissemination was inspired by a lack of resources in the first place, and spending untold hours conducting search requests is not drastically different from spending untold hours processing SARs.

In any case, NCIS SFI was not acting in bad faith, of course. SFI was performing the duties and meeting the targets set forth in the NCIS Service Plan. This is the second of the issues relevant to the significant reduction in nonconsent disseminations. Guided by the Service Plan, SFI has focussed on supporting national strategies (CICFA, CIDA, REFLEX, firearms), which is reasonable—and some of this work is very exciting. What is not as reasonable, however, is that this focus may have been partly at the expense of local LEAs, who also have a role to play on SARs. What, then, are the overall aims of the regime? Are they to combat national-level serious and organised crime, or are they to combat local priorities (Level 1 of the NIM), or both? The regime appears to not have any governing mission statement which clarifies this in any way (or at least one agreed by all relevant parties). The Service Plan objectives seem to support the role of SARs nearly exclusively in national-level crime-fighting, but perhaps only because the issue has never been fully raised and resolved. The Service Plan appears too narrowly focussed, failing to explicitly recognise the potential for SARs to contribute to local strategies (in this regard, the SARs regime represents an anomaly for NCIS, which otherwise focuses exclusively on national serious and organised crime). NCIS does, in fact, assist local law enforcement through the Elmer rollout. But this was largely not the case for one year of the regime's history. With different—and explicit—aims for the regime driving a different Service Plan, it's unlikely that the reduction in nonconsents would have taken place in the way that it did. The aims of the regime must be made explicit.

Lastly, there may have been some considerable ramifications of the June 2004 decision that deserved greater discussion and perhaps approval within and from the larger SARs community. This raises the third issue, the manner in which the decision was taken—and ownership. By all accounts, the communication on the decision was poor. Regional NCIS offices were not aware of the June 2004 reduction until weeks or in some cases months later. LEAs were not informed. Industry was not informed. Some claims have been made that discussions around the issue were held in high-level meetings, like with CICFA and the MLRTF. If this is the case, meeting attendees don't seem to have been fully aware of the implications of the discussion. Clearly, the ramifications of the June 2004 decision do not appear to have been fully thought through. Was the decision made with seemingly little forethought because of a perceived lack of accountability? This may be the case because the regime has no owner. Such weighty decisions should probably take place with greater concern for all parties involved, guided by firm ownership.

HMRC and SOCA: Finally, two sizable mergers are worthy of attention in the criminal justice system. Inland Revenue and HMCE became Her Majesty's Revenue and Customs on 18 April 2005, and, of more direct relevance to the SARs regime, NCIS, the National Crime Squad, and certain investigative units of HMCE are merging to become the Serious Organised Crime Agency (expected in April 2006). This implies that SARs will be disclosed to SOCA; NCIS will no longer exist. Details surrounding the impact of the merger(s) on the regime have yet to be discussed. Two points are worth making on the SOCA setup; 1) it is essential that the regime—which should by no means only focused on the most serious of offenders—does not get lost in the shuffle; and 2) critically, the formation of SOCA presents a rare window of opportunity to right many of the wrongs of the past in one fell swoop.

Figure 3. Monthly Receipts and Disseminations of SARs by NCIS, January 2003-April 2005



Source: NCIS. Disseminated SARs include LEA-bound consents but exclude SARs related to terrorism and various other sensitive issues; SARs destined for overseas jurisdictions; SARs sent out in bulk backlog-clearing exercises (see footnote 45); and SARs sent to NCIS units other than SFI. According to these figures, roughly 120,000 SARs were retained at NCIS between July 2004 and April 2005. But some 20,000-30,000 SARs will have been disseminated via CD-ROM to several LEAs, so the true number retained at NCIS is perhaps between 90,000-100,000. These will have been subject to national-level (but generally not local-level--and this is the issue) keyword searches/other analyses. As at June 2005, retained SARs are available to LEAs via the rolled-out Elmer database.

7.3.1. The Experiences of Overseas Jurisdictions

This research, as noted, is driven in large part by the desire of regulated sector entities for systematic information/feedback, for reassurance that their efforts are rewarded by sufficient appropriate action on the part of law enforcement. Of course, such reassurance is not forthcoming at present, seemingly due at least as much to limitations in information management as to whether or not SARs are actually being used. A number of recommendations for improvement(s) to the regime with regard to systematic information and feedback simply fall out of a deeper understanding of LEA protocols and policies. But another potential source of insight is the experience of overseas jurisdictions, who may have faced similar issues in their own countries. As such, the research looked to a small number of national financial intelligence units for their specific thoughts. Given the short timeframe of the study, efforts were focussed on three such units: the Australian Transaction Reports and Analysis Centre (AUSTRAC), the Financial Crimes Enforcement Network of the United States (FinCEN), and the Financial Transactions and Reports Analysis Centre of Canada (FINTRAC). Among other things, the three were asked whether they had faced such concerns of industry, namely perceptions that little is being done with the reports provided and/or that perhaps SARs (or similar reports) are of little crime-reduction value; and what solutions were implemented to address such concerns.[145] Conversations held with parties from outside these units and a search of the (limited) relevant literature rounded out the analysis. International findings are summarised below.

By way of background, each of the three national financial intelligence units is a stand-alone organisation. AUSTRAC sits under the Australian Attorney General's Department, FinCEN sits under the US Department of the Treasury, and FINTRAC sits under the Department of Finance Canada.[146] Each unit is responsible for the

[145] The research recognises that national financial intelligence units do not control the use made by LEAs of financial information/intelligence and do not speak on their behalf. But they should be aware of the lay of the land. Time limitations prevented deeper research with foreign LEAs directly.

[146] This section is not intended to provide a complete exposé of the roles and responsibilities of each national financial intelligence unit. For detailed information, see each unit's annual report: AUSTRAC (2004), FinCEN (2005), and FINTRAC (2004), all available online. For more on the various functions of national financial intelligence units around the world, see IMF/WB (2004) and Thony (1996). Gold (continued)

receipt and analysis of raw SARs and other financial transaction reports (FTRs; all three receive both suspicion- and threshold-based reports).[147] Each unit states that all SARs are evaluated, though in the case of FinCEN, this appears to happen in conjunction with law enforcement (through what are known as High-Intensity Financial Crime Areas, or HIFCAs). Unlike NCIS, each unit also has regulatory oversight of its AML regime. This implies that while the units make use of the information provided by the reporting entities, they also liaise directly with these entities with both carrots and sticks to ensure compliance with AML regulations (i.e. to ensure that the information provided is timely, accurate, and high-quality).[148] None of the units has an operational arm, so, like NCIS, SARs/FTRs and/or other intelligence products are sent to various LEAs for action. All units provide LEAs with enhanced tactical (and, increasingly, strategic) intelligence products, which are the results of data-mining, cross-referencing other databases, and/or other analytical exercises. AUSTRAC and FinCEN (but not FINTRAC) provide select LEAs with remote electronic access to their raw data in arrangements governed by various legal gateways and MOUs; access levels may differ according to the security clearance levels of registered users. Search requests may also be filed by interested LEAs to AUSTRAC and FinCEN; search requests are prohibited under Canadian legislation, though LEAs may submit "voluntary information" alerting FINTRAC to their current operational priorities (FINTRAC may then make use of voluntary information to tee off intelligence development).[149] Statistics on the number of SARs/FTRs received by each unit, as well as by NCIS, are presented in Table 7.11, below.

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and Levi (1994), KPMG (2003), and PIU (2000) also present some limited comparative international information, though not on the topics discussed here.

[147] Note that each unit deals with suspicion-based reports (referred to by AUSTRAC, FinCEN, and FINTRAC as SUSTRs, SARs, and STRs, respectively) as well as various types of threshold-based and other reports; suspicion-based reports and other financial transaction reports will be referred to as SARs and FTRs for the purposes of this section.

[148] FinCEN does not actually conduct the compliance examinations; these are carried out by regulators of the specific industries involved.

[149] Legislation prohibits FINTRAC from disseminating the complete results of its analyses to LEAs; rather, *disclosures* (as they're known) contain the who, what, when, where, and little else. LEAs may gain access to full analyses via a court order requiring FINTRAC to produce relevant information, though this avenue has not been widely used.

What, then, of the experiences of the three financial intelligence units? Most importantly, each of the units noted that systematic feedback on the LEA use of SARs (and other FTRs) is lacking, as in the UK.[150] In fact, each somehow acknowledges the issue and its importance in various publicly-available documents, such as annual reports and speech transcripts. Other public bodies have occasionally weighed in (e.g. Auditor General of Canada, 2004). The limited provision of systematic LEA feedback prevails for the traditional, perhaps universal, reasons discussed earlier in the present chapter (see page 141), including: operational priorities may preclude the reporting of feedback (or at least timely feedback); the period of time between the use of SARs/FTRs and case outcomes may be so large that details (or the importance of feedback) are forgotten; the initial users of SARs/FTRs may differ from those ultimately responsible for the case outcomes (with little cross-talk between the groups); and limited IT systems and protocols may render the provision of feedback difficult or impossible.[151]

[150] That little is known about the LEA use of SARs and their threshold-based brethren comes as no surprise. While the literature is thin, of the few and sometimes dated non-UK sources, most conclude that insufficient information exists on the actual use of SARs/etc. The most comprehensive analysis is that of Reuter and Truman in their 2004 analysis of the global AML regime. They focus heavily on the situation in the US, noting that "for the 6½ year period ending October 3, 2002, 940,000 SARs produced 70,000 direct referrals to federal law enforcement agencies, of which almost half were to the FBI. Unfortunately, there is no information on how many resulted in or contributed to cases". Another example is van Duyne and de Miranda (1999), who find for the Netherlands that "hardly anything is known [in their own research] as to what the follow-up measures of the police and prosecution might have been, owing to a lack of feedback from the 'field'".

[151] Feedback from LEAs on the use made of SARs may also be lacking because the information provided by financial intelligence units is infrequently used. Reuter and Truman (2004) found some evidence in the US that "the existing regulatory system and the information it generates is not well used in prosecutions". The Auditor General of Canada highlighted the fact that the value to LEAs of FINTRAC's disclosures (containing only the "designated information" permitted by legislation) was limited by the lack of detail and context in the disclosures themselves (Auditor General, 2004).

Table 7.11. SARs/FTRs in Australia, Canada, the United Kingdom, and the United States

Country	*2000*	*2001*	*2002*	*2003*	*2004*
			SARs received		
Australia	7,068	7,247	7,809	8,054	11,484
Canada	--	--	3,772	17,358	14,794
United Kingdom	18,447	29,976	56,023	94,708	154,536
United States	163,184	204,915	281,373	506,948	639,884
			SARs received per population millions		
Australia	369.0	374.5	399.6	408.2	576.3
Canada	--	--	120.6	550.9	465.8
United Kingdom	314.3	509.1	948.4	1,598.4	2,599.9
United States	572.6	711.4	966.8	1,724.1	2,154.1
			SARs received per unit of GDP (US$ billions, current prices)		
Australia	18.7	20.3	19.5	15.7	18.6
Canada	--	--	5.1	19.9	14.9
United Kingdom	12.8	20.9	35.7	52.6	72.7
United States	16.6	20.2	26.8	46.1	54.5
			FTRs received (aggregate figures for all non-SARs reports)		
Australia	7,052,190	7,815,416	8,937,426	9,501,485	10,768,039
Canada	--	--	--	2,086,153	9,482,536
United Kingdom	--	--	--	--	--
United States	13,416,587	12,996,620	13,105,206	13,286,257	13,751,730

Sources: AUSTRAC (2004), FinCEN (2004a; 2004 SARs figure estimated from January-June 2004 data), FINTRAC (2004), and NCIS; IMF World Economic Outlook database, April 2005 revision (for GDP); IMF International Financial Statistics database (for population; 2004 figures estimated from 2000-03). FINTRAC was operationally launched in 2001, so no data are available prior to 2002. Figures from AUSTRAC and FINTRAC were provided in fiscal year format, such that 2004 data represent information for 2003-04. Also, AUSTRAC and FINTRAC officially refer to their SARs as SUSTRs and STRs, respectively. FTR figures for AUSTRAC include SCTRs, IFTIs, and ICTRs; for FinCEN figures include CTRs, CTR-Cs, and 8300s; and for FINTRAC figures include LCTRs and EFTRs. The UK does not use FTRs.

This is not to imply that no feedback is ever received from LEAs, however. On the contrary, at least in Australia and the US, while levels of systematic feedback appear to some extent suboptimal, both jurisdictions seem to fare somewhat better than the UK. (Canada's system, launched in 2001, is so new that priorities were reasonably focussed on getting the system up and running, ensuring the smooth functioning of its electronic reporting systems through to the successful disclosure of information to LEAs. Improving the systematic understanding of the use by law

enforcement of FINTRAC disclosures is now becoming a priority.[152] Anecdotal evidence suggests that LEAs find the disclosures of value.) Interestingly, in the MOUs agreed between AUSTRAC and its law enforcement partners allowing access to AUSTRAC information, AUSTRAC requires LEAs to provide feedback on a quarterly basis (including on the remote use of databases). LEAs generally comply, according to AUSTRAC. AUSTRAC and FinCEN include brief feedback questionnaires with various intelligence packages they send out, though with admittedly imperfect response rates (e.g. FinCEN reports a 50 percent response rate). Relations with LEA partners appear strong. In this regard, AUSTRAC and FINTRAC have outposted liaison staff (AUSTRAC staff are outposted with LEAs; FINTRAC staff are outposted in FINTRAC regional offices), and FinCEN reports that most federal agencies have liaison staff of their own posted at FinCEN. Liaison staff provide channels for ad hoc feedback. Moreover, these liaison staff may have responsibilities which include the collection and provision of feedback back to the financial intelligence unit (e.g. AUSTRAC staff may suggest procedures to increase the efficiency and effectiveness of feedback, or they may follow-up with the partner agency to clarify information on investigations where they know that SARs/FTRs have been of use). Liaison staff may also provide analytical training and support to partner agencies.

Encouraging the use of SARs/FTRs and encouraging feedback is a never-ending part of the workload of each unit. All of the units appear to maintain ongoing training programs for LEAs on the importance and potential of financial intelligence, and the feedback issue is raised repeatedly. But beyond such routine activity, each unit is taking or has recently taken active steps to improve the systematic understanding of the use of financial reports and intelligence. AUSTRAC, for example, employed a consultant to explore the limitations in feedback systems and to suggest improvements (e.g. through standardising feedback processes, through initiatives to educate LEAs on why feedback is needed, through the use of staff with direct responsibility for the provision of feedback, through the use of case

[152] FINTRAC potentially faces a less-daunting task: FINTRAC releases fewer than 200 of its disclosures (which are not individual reports, but rather enhanced intelligence products) to LEAs per year. The average disclosure relates to three million Canadian dollars, with five individuals and three business involved, relating to some 57 transactions from three reporting entities (FINTRAC, 2004).

management systems). FinCEN is awaiting the completion of BSA Direct, its new information storage and delivery system (pulling together reporting entities, FinCEN, and LEAs). Among the many stated benefits of the system is an improvement of feedback to industry.

Finally, and moreover, concerns that systematic feedback on the LEA use of SARs is lacking should be viewed in the context of information provided to the public directly by AUSTRAC, FinCEN, and FINTRAC on developments in their AML regimes. In stark contrast to the UK, the three units provide a wealth of information to the public, primarily (and most efficiently) through their websites. All publish an annual report as well as various other documents, including transcripts of speeches, guidelines and guidance notes, newsletters, biannual reviews, information circulars, and strategies for the future.[153] AUSTRAC is the first of the units to launch an online e-learning initiative to assist in the education/training of the regulated sector and public-at-large. Most publications discuss the use made of SARs/FTRs by LEAs, including statistics on trends and case examples. This information may be drawn from the internal monitoring of database access (e.g. through metadata on the numbers of logins or searches), from the above-mentioned semi-regular feedback from LEAs, or from one-off conversations regarding specific cases (FinCEN, for example, reaches out informally to LEAs three times each year for case examples for the SAR Activity Review). Publications typically are designed with reporting entity input, and are often sent to select industry representatives/groups for comment/review prior to publication. Industry seems to hold the publicly available information of the three units in high regard. In fact, relations with industry in the three jurisdictions appear broadly healthy and positive. Each unit has a sizable outreach/liaison program with industry, not least given the regulatory functions that each must carry out. FINTRAC spent considerable time with reporting entities preparing for its operational launch in 2001. AUSTRAC, in particular, appears to have a strongly cooperative relationship with reporting entities, thought to be the result of a long-standing focus on carrots—not sticks—in its regulatory approach, as well as continued emphasis on

[153] NCIS SFI publishes no publicly available report (and the NCIS *Annual Report* mentions SARs in far too much generality to be of use).

training materials.[154] Like the UK, Australia and the US maintain permanent advisory groups with government, law enforcement, and industry membership (AUSTRAC's Provider Advisory Group and FinCEN's Bank Secrecy Act Advisory Group), which discuss AML policy and relevant issues, like policy design, feedback and publications.

In sum, while each of the three units receives suboptimal amounts of feedback from LEAs on the use made of SARs/FTRs and related intelligence packages, performance relative to the UK in this regard appears superior. According to the units, whilst reporting entities had registered concerns that feedback could be improved, entities in general did not seem to feel that their reports were unused or of little value.[155] In large part, this appears to be the result of 1) an abundance of publicly available information drawing on moderate amounts of feedback on the use of financial reports; and 2) good liaison between AUSTRAC, FinCEN, and FINTRAC and their law enforcement partners, and with industry itself; 3) efforts to obtain feedback from LEAs (e.g. through active feedback-gathering efforts on the part of liaison or other staff, through steps taken to streamline and improve feedback processes, and through ongoing training activities).

7.4. Conclusion

Despite calls for more information/feedback from industry, and despite the attention brought to the regime by KPMG and others, very little was known about the LEA use and management of SARs in the UK. This chapter has attempted to fill the gap in existing knowledge, highlighting the often complex issues surrounding the LEA side of the UK's AML regime. It has flagged up the fact that SARs appear to be under-utilised by most LEAs (though, of course, over-use would likely be socially

[154] While in no way suggesting that sanctions should never be used in enforcing regulatory violations, there is an unavoidable downside (particularly when sanctions receive press coverage): an increase in defensive reporting. This appears to be an issue in the US, following highly visible actions taken against Riggs Bank and Amsouth Bank.

[155] This is confirmed by industry comments received from various foreign sources which suggest that reporting entities do not feel that the information they provide is unused, but rather that 1) there is an imbalance between their efforts and those of government, including LEAs (not least given industry outlays on systems/training/staff); and 2) that the information is not used as effectively or efficiently as it could be (e.g. *how are SARs prioritised?* and *what sort of advanced analysis/datamining is carried out?*).

inefficient, so the intent should not be to drive all law enforcement to the full use of SARs); systematic information maintained by LEAs on their use of SARs is limited and often of poor quality; the information which is, in fact, maintained is under-utilised by NCIS and subsequently by the larger policy community; communication and feedback between and within LEAs, NCIS, ACPO, government, and industry is suboptimal; and positive change is afoot in the regime—especially with the rollout of the Elmer database. The SARs regime should be a powerful tool in the deterrence, disruption, and enforcement of money laundering and predicate offences.

That SARs are broadly under-utilised is an important, though not surprising (not least given previous research on the subject extending back to 1994 with Gold and Levi), finding from a policy perspective. After all, while there is no agreement on the exact outlay, the reporting entities spend likely somewhere on the order of nearly 100 million GBP annually (Reuter and Truman, 2004, citing KPMG)—or more. That is a considerable sum if it provides little return on investment for the undeterred (though clearly the very existence of a SARs regime should deter some criminality). Of course, law enforcement use of the financial intelligence provide by the regulated sector is but one contributor to the efficacy of a SARs regime (see also the previous chapter, which discusses another)—but certainly seems to be one of sufficient importance. And that the regime may have a dynamic affect on deterrence seems legitimate: if offenders realise that there is no impact of having SARs filed on them, the regime's deterrent value (whatever it is) should diminish.

Worth pondering is whether or not law enforcement under-performance in this regard (though as with any exploration of the use of intelligence, it's hard to know exactly what solid performance should look like—certainly SARs should not be examined one-by-one) is part-and-parcel of any SARs regime, or rather is something upon which LEAs could devote improvement efforts. The latter seems likely, but anecdotal evidence around the world seems to suggest that SARs may not be well-used (or well understood?) yet. Along these lines, it seems fair to question whether or not the FATF recommendations relating to the provision of feedback/statistics (notably Recommendations 25 and 32) are too pie-in-the-sky and virtually impossible to accord with in any meaningful way. Moreover, it seems fair to consider that what

is called for in these recommendations is likely not of real use to information consumers, given the intricacies of SARs and their use (or lack thereof).

Chapter 8. Conclusion

So is asset recovery (and, indeed, supportive anti-money laundering policy) an effective public policy? That is, does asset recovery, the process through which offenders are deprived of the proceeds of crime, reduce crime? Despite strong support for asset recovery in the policy arena, virtually no theoretical or empirical work to date has confirmed that asset recovery reduces, or should reduce, crime. This thesis sought to begin to fill this gap in understanding through separate-but-related chapters of asset recovery as a crime-reduction policy. This final chapter sums up the findings of the research. It begins with a discussion of specific findings, suggests potential directions for future research, and closes with some general thoughts on asset recovery.

Perhaps most importantly (and thankfully, given the popularity of asset recovery in policy circles), there is indeed theoretical support for asset recovery in the fight against crime. Drawing on the economics of criminal behaviour literature begun by Becker (1968) and building on the asset-recovery-specific work of Bowles *et al* (2000), Chapter 4 (the first substantive chapter following a background section and a literature review) applied economists' deterrence hypothesis (an application of the theory of decision-making under uncertainty) to the study of asset recovery. In sum, *ceteris paribus*, asset recovery should reduce crime by lowering expected net returns per offence (this by increasing expected punishment costs and to some extent criminal operating costs, and by removing operating capital). But asset recovery's impact should depend on 1) the capital requirements of and capital availability to offenders; 2) the certainty of asset recovery—which is affected, among other things, by offenders' ability to simply hide the proceeds of crime through money laundering activity; and 3) offenders' spending/saving habits. (This hiding ability and offenders' spending/saving habits are examined in subsequent thesis chapters, discussed below.) Finally, the possibility exists, though unlikely, that asset recovery may increase crime through income effects.

Of course, asset recovery is not single power, but rather a policy package of various options. Chapter 4's theoretical analysis also suggests, not surprisingly, that different powers should affect crime differently. The recovery of criminal proceeds should exhibit a stronger deterrent effect than that of profits (which itself should have

little impact on crime in the absence of other forms of punishment), and the impact of the recovery of aggregate proceeds should be greater still. The deterrent effect of taxation recovery is driven in large part by the size of interest and penalties (and high interest/penalties can allow this largely profit-based power to emulate the stronger proceeds recovery approach). The recovery of instrumentalities is somewhat of a wild card, and its impact on crime depends largely on whether the forfeiture of items represents a tangible loss to the offender. And various provisions increase the likelihood that assets will be recovered and/or increase criminal operating costs, which reduce expected net returns per offence and thus reduce crime. Overall, then, the design of any asset recovery policy package will affect its crime-fighting efficacy.

The remaining chapters explored issues of importance to asset recovery's crime-fighting efficacy. Chapter 5 explored offenders' spending/saving habits. After all, were offenders to spend all of their criminal proceeds on unrecoverable goods and services (e.g., "wine, women, and song"), there would be nothing to recover, and asset recovery would have no teeth. Chapter 5 examined offenders' benefit from crime, their net worth, and their judgment proof status, all using proxy variables found in JARD. Benefit and net worth differed considerably by primary offence, with the white collar crimes, particularly VAT fraud, leading the pack in both agreed benefit and order amount. JARD benefit ranged from one to more than 156 million GBP, with a mean of 226,714 GBP and a median of 12,388 GBP; JARD order amount (net worth) ranged from zero to more than 18 million GBP, with a mean of nearly 49,000 GBP and a median of some 1,938 GBP.

Most importantly, guided by the imperfect yet informative available data, offenders on average appear to save some 47 percent of their benefit from crime (though this differed, of course, by offence type). This tempers faith in asset recovery's efficacy in deterring crime (offenders are not likely to be arrested/convicted with probability of one (i.e. 100 percent of the time), and so truly deterrent sanctions would need to be some multiple of the estimate of the criminal harm), though it is in no way suggestive of a complete inability to deter. Certainly, the finding reinforces the importance of asset recovery as a complement to, as opposed to substitute for, imprisonment: the two together may represent a sufficient deterrent, whereas the two in isolation might not. And asset recovery (and other

monetary sanctions) should deter at least a subset of offenders (e.g. offenders whose crime type(s) carry a greater likelihood of arrest/conviction, thus requiring a smaller multiple of the criminal harm to deter; and/or offenders who carry out crime which meets the criteria for recovering the proceeds of general criminal conduct). Certainly, given the differing savings rates for each crime type, depending on the goals/targets of asset recovery, it may be most efficient for law enforcement to target particular crime types in thinking of any asset recovery strategy.

Offenders can and will take steps to hide the fruits of their labours, and asset recovery will be largely toothless if offenders can successfully do so. Most asset recovery regimes include anti-money laundering components to prevent offenders from hiding—laundering—their proceeds (though AML components are often viewed as distinct from asset recovery policy packages). The crime-reduction efficacy of AML policies, and thus asset recovery, is a function of the ability of offenders to reduce their exposure to asset recovery; of regulated sector entities (banks, accountants, lawyers, etc.) to alert law enforcement when they know or suspect that an offender is laundering proceeds; and of law enforcement to make use of the information provided by the regulated sector. Chapter 6 and 7 considered the latter two issues in turn.

Chapter 6 turned to the theme of regulated sector entities' (banks, accountants, lawyers, etc.) capacity to alert law enforcement when they know or suspect that an offender is laundering. Regulated sector entities must alert law enforcement (by filing SARs) if they know or suspect that an offender is laundering proceeds. While the very existence of this requirement likely deters some criminality, suspicious activity reporting does not deter all offenders from offending. As such, the targeting accuracy of the regulated sector is critical. In this regard, Chapter 6 explored the extent to which SARs targeting represents more signal (i.e. accuracy) than noise (i.e. false positives), using SARs' hits on various law enforcement databases as proxies for success. Some 20.7 percent of a sample of SARs provided by three police forces had hits on PNC, and 27.4 percent had hits on respective force intelligence systems. If hits on either PNC or force intelligence are considered indicative of overall targeting success, then some 35.6 percent of the sample represents signal, not noise. Though there is no clear hit rate which defines success, this may be suggestive of moderate-to-

solid performance in targeting on the part of the regulated sector (or at least that some SAR filers appear to find and report signal—perhaps because they employ effective monitoring systems, and/or they see *very* obviously suspicious activity). After all, these checks represent nothing more than simple data-matching, not advanced analytics; it is reasonable to assume that more advanced work would reveal higher success rates, at least using these proxies for targeting accuracy (i.e. the "noise" may not be noise at all).

What this implies is that (assuming we're seeing OK targeting performance on the part of SAR filers) it may be the case that there is some potential for the SARs regime to affect the criminality of those offenders undeterred by its very existence. Of course, this depends on the ability of law enforcement to turn the financial intelligence provided by SAR filers into appropriate action (explored in Chapter 7)—which does not appear to be the case. And we cannot escape from the fact that even if SAR filers are reporting signal, not noise, that signal may represent the activity of the criminals who aren't very talented (i.e. the amateur offenders), who, it seems reasonable to posit, may not represent those most harmful offenders of greatest interest to society.

Finally, as the criminality of the undeterred who have been identified by the regulated sector will only be reduced/prevented (and/or their assets will only be recovered) if law enforcement agencies make use of the SARs sent to them, the final substantive chapter, Chapter 7, explored the actual use and management of SARs by law enforcement. The chapter highlighted the often complex issues surrounding the LEA side of the UK's AML regime. It flagged up the fact that SARs appear to be under-utilised by most LEAs; systematic information maintained by LEAs on their use of SARs is limited and often of poor quality; the information which is, in fact, maintained is under-utilised by NCIS and subsequently by the larger policy community; communication and feedback between and within LEAs, NCIS, ACPO, government, and industry is suboptimal; and that positive change is afoot in the regime—especially with the rollout of the Elmer database. That SARs are broadly under-utilised is important, though not surprising. After all, while there is no agreement on the exact outlay, the reporting entities spend a considerable sum on SAR filing—disappointing if it provides little return on investment for the undeterred

(though clearly the very existence of a SARs regime should deter some criminality). And that the regime may have a dynamic affect on deterrence seems legitimate: if offenders realise that there is no impact of having SARs filed on them, the regime's deterrent value (whatever it is) should diminish.

The thesis has contributed to the corpus of knowledge on asset recovery, particularly through the theoretical and empirical analyses in the substantive chapters discussed above. But it is in no way the last word on the subject. Indeed, there is a need for future research.

To begin, it would be interesting to have a greater understanding of asset recovery's costs and benefits. Asset recovery should be a valuable crime-fighting tool, but at what cost? Financial investigation is work—even though numerous steps can be taken to reduce investigative costs (e.g. through the use of better technology, such as that relating to SARs). And financial investigators do not grow on trees, but rather must be trained and accredited. While not an analysis of the benefits and costs of asset recovery as a policy package, there are indicators that at least asset recovery is not living up to its promise in the UK: the critical review by the National Audit Office (2007) of the UK's Assets Recovery Agency implies on-the-ground benefits (of ARA, at least) falling short of costs. Of course, it would be inappropriate to simply compare the costs of asset recovery to the amounts recovered—deterrence is clearly a very important part of the mix, and no empirical research exists which estimates the amount of crime deterred—so any cost/benefit analysis would need to be properly carried out, mindful of assumptions which would need to be made.

This begs the question: why not carry out an empirical analysis on asset recovery's deterrence value? Unfortunately, poor data, coupled with a large array of concurrent policy changes (and changes in law enforcement practice), preclude an analysis of this kind being carried out at present. Simply put, there's probably just too much going on, and too few data to capture the impact of asset recovery on crime. This may change years in the future (or not: data shortcomings may never be fully addressed; see Levi and Maguire (2004) for related discussions on evaluating the impact of anti-organised crime policies), but for now remains the stark reality. This implies that future research must chip away at the unknowns.

The most obvious future research, and probably the research which should be tackled first, relates to the search for/use of better data. Of greatest importance, while the thesis has contributed to the body of knowledge on offender spending and saving behaviour, questions remain. Offender financial behaviour presumably differs (perhaps through a causal relationship) in the presence of children and/or other dependents, with sufficient educational attainment, and/or with legitimate employment. But data on these characteristics don't exist, and/or are not of sufficient quality to be of use. Future research should seek to capture these data-points, along with the other relevant personal/criminal/financial characteristics. Better data along these lines would allow for explorations of the factors which drive certain types of criminal activity—and might suggest appropriate policy interventions to combat crime. And better data would allow for analyses of offence choice: if more money can be made with white collar crime, and drug dealing and other blue collar crime involves violence and its consequent risks, why are more offenders not forgoing such crime for the white collar frauds/etc.? What are the barriers to participation in white collar crime (or even simply are there barriers to participation in such crime?)?

Along these lines, the present data have not allowed for any serious analyses of flows, just stock variables (most notably with net worth). The data don't even allow for analyses of income (legitimate or otherwise, both flows) per unit time. Future analyses should look to capturing better data on flows, particularly on illicit and legitimate earnings per unit time—and subsequently comparing these data to findings related to legitimate income across the UK. Such analyses would help to illustrate whether or not offenders in general or those carrying out specific offences might be earning more or less than their non-criminal counterparts. This also might go some way to understanding whether or not criminal activity is a substitute for or complement to legitimate employment—and would help to suggest the merit of crime-control policies based on improving offenders' employment opportunities.

This research has sought to explore the criminal benefit, net worth, judgment proof status, and specific asset-holding behaviour of acquisitive offenders. It has not sought to compare the financial characteristics of offenders to non-offenders. Future research (particularly that drawing from better data) should look to the statistical and

economic literature on income and wealth across the population to examine differences between offenders and their legitimate counterparts.

Lastly, future research might seek to involve the UK's Enforcement Task Force, which is responsible for enforcing outstanding confiscation orders, particularly those pre-POCA. What is it about these particular confiscation orders that makes them outstanding? Is it that offenders had insufficient funds to pay off the orders—were they judgment proof—or were the orders simply un-enforced and thus ignored (itself suggesting a dynamic component to the issue)? What have offenders done with their assets in the meantime?

The need for future research is not limited to spending/saving behaviour. Reporting entities' ability to successfully target suspicious activity calls for deeper understanding. Another proxy for targeting accuracy might approach the issue from another angle. A random sample of convictions could be checked against the Elmer database to see whether or not SARs had been filed against the convicted offenders (and whether or not hit rates differed by crime type). These findings might then serve to bolster (or not) the findings of Chapter 6. As it happens, the Joint Assets Recovery Database, which records all confiscation orders and cash seizures/forfeitures in the UK, was modified in 2006 to capture similar information (namely whether one or more SARs had been filed on the offender in question). Assuming this field is used by FIs—which is not necessarily going to be the case, sadly, given how FIs have failed to fully embrace JARD—just such an analysis could be conducted quite easily.

Reporting entities filter their internal alerts (which are generated by staff and automated transaction monitoring systems), such that fewer SARs are sent than internal alerts generated. Future research should examine those alerts which never become SARs (compared to alerts which are indeed filed) to explore the extent to which the filtering process may represent a misguided disposal of signal, not noise—with implications for the impact of the SARs regime on the undeterred.

But perhaps the most interesting question on targeting—though one which may go unanswered due to civil liberties constraints—is whether or not reporting entities would have a greater likelihood of finding truly suspicious activity by simply filing SARs on a random sample of their customer base. It seems unlikely that this

would be the case, but certainly some customers with links to criminality will be flagged up with random selection—so the question becomes what is the marginal benefit of looking for suspicious activity over simple random selection. Then it would be possible to begin to consider the marginal benefits and costs of a SARs regime over and above an undoubtedly lower cost random regime.

On law enforcement agencies' use of SARs, change has been underway for some time now, not least with Sir Stephen Lander's review of the SARs regime in 2006. This begs for follow-up research: are SARs now being used? What outcomes do we see?

Whither asset recovery? First and foremost, asset recovery should work to reduce crime. But it's never going to be an acquisitive crime panacea (of course, there is no crime-fighting panacea, for acquisitive crime or crime in general). It must be part of a larger policy package, one which includes other forms of punishment. While not being a panacea, however, it should be of crime-fighting value: asset recovery should deter crime (by lowering expected net returns per offence), disrupt crime (by generating criminal intelligence), and prevent crime (by removing working capital). It won't do all of these things perfectly well, but all things considered, it represents a decent weapon in the crime-fighting armoury.

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Appendix 1: Estimated Benefit, Agreed Benefit, Order Application, Order Amount

Table A1. Estimated Benefit, Agreed Benefit, Order Application, and Order Amount

	Valid	*Missing*	*Minimum*	*Maximum*	*Sum*	*Mean*	*Median*	*Std. Deviation*
Estimated benefit	3,170	510	£0	£112,113,400	£947,034,314	£298,749	£14,448	£2,778,894
Agreed benefit	3,680	0	£1	£156,577,417	£834,306,601	£226,714	£12,388	£3,243,795
Order application	3,163	517	£0	£35,955,397	£273,971,285	£86,618	£2,985	£895,603
Order amount	**3,680**	**0**	**£0**	**£18,648,679**	**£180,236,233**	**£48,977**	**£1,938**	**£422,419**

Source: JARD.

Table A2. Estimated Benefit and Agreed Benefit by Primary Offence

	Estimated benefit				*Agreed benefit*			
	Mean	***N***	***Std. Deviation***	***Median***	***Mean***	***N***	***Std. Deviation***	***Median***
Burglary/Theft/Handling/Robbery	£114,137	302	£315,249	£25,664	£91,069	372	£238,610	£21,417
Counterfeiting/Intellectual Property/Forgery	£274,540	55	£394,862	£46,761	£186,097	66	£341,525	£36,768
Drug Trafficking	£187,928	2,131	£1,969,837	£7,000	£95,410	2,431	£509,617	£6,000
Excise Duty Fraud	£862,524	92	£2,836,740	£203,772	£320,557	107	£552,783	£100,000
Money Laundering-Drugs	£183,289	48	£479,336	£44,168	£158,689	56	£319,525	£43,854
Money Laundering-Other	£778,008	66	£1,814,773	£129,081	£644,765	80	£1,630,239	£100,426
Other Fraud/Embezzlement/ Deception/Crimes of dishonesty	£533,576	294	£2,855,179	£50,387	£328,499	345	£1,312,941	£41,003
Pimps and Brothels/Prostitution/ Pornography	£424,054	24	£762,753	£161,295	£299,091	25	£449,714	£66,829
Tax and Benefit Fraud	£137,570	22	£258,075	£35,417	£128,867	32	£274,116	£34,459
VAT Fraud	£6,555,384	24	£22,586,919	£1,478,053	£10,557,368	29	£34,849,260	£619,040
Total	**£299,852**	**3,058**	**£2,827,261**	**£13,809**	**£226,917**	**3,543**	**£3,304,435**	**£11,691**

Source: JARD.

Table A3. Order Application and Order Amount by Primary Offence

	Order application				*Order amount*			
	Mean	***N***	***Std. Deviation***	***Median***	***Mean***	***N***	***Std. Deviation***	***Median***
Burglary/Theft Handling/Robbery	£52,131	297	£199,414	£7,485	£30,174	372	£91,015	£3,070
Counterfeiting/Intellectual Property/Forgery	£123,439	55	£207,014	£26,155	£69,947	66	£153,551	£11,073
Drug Trafficking	£35,412	2,130	£235,568	£1,598	£23,151	2,431	£190,099	£1,063
Excise Duty Fraud	£341,726	89	£2,038,888	£59,180	£94,327	107	£190,154	£24,000
Money Laundering-Drugs	£69,877	47	£122,068	£11,100	£60,149	56	£112,287	£13,899
Money Laundering-Other	£117,067	67	£154,167	£50,000	£90,366	80	£117,234	£47,872
Other Fraud/Embezzlement/ Deception/Crimes of dishonesty	£348,396	296	£2,558,130	£18,285	£165,248	345	£1,160,117	£13,000
Pimps and Brothels/Prostitution/ Pornography	£152,155	24	£257,110	£27,336	£123,280	25	£193,374	£20,000
Tax and Benefit Fraud	£90,357	23	£147,019	£24,897	£65,209	32	£108,678	£30,480
VAT Fraud	£750,046	22	£1,614,076	£143,750	£661,843	29	£1,633,178	£39,586
Total	**£86,753**	**3,050**	**£910,823**	**£2,772**	**£49,163**	**3,543**	**£429,965**	**£1,840**

Source: JARD.

Appendix II: SARs Case Examples Provided by LEAs

LEAs were asked, in the research for Chapter 7, to provide sanitised case examples of the use of SARs. Eighteen publicly usable examples were received from 16 LEAs. It should be noted that while these case examples can illustrate the manner in which SARs do appear to contribute to crime reduction, there is little empirical merit in presenting individual case examples as sound evidence of the overall efficacy of the regime; one success-story from each LEA does not necessarily imply a well-functioning AML system. Case examples are, however, useful in indicating the range of LEA activity related to SARs, and also in suggesting to reporting entities that their efforts are not in vain (potentially motivating industry to continue to cooperate with the reporting requirements).

Despite guidance to the contrary, many LEAs provided only limited information. Time constraints prevented follow-up action to gather more detail (though there is a fine line between providing interesting detail and exposing sensitive information). Further, it is indeed disappointing that more than half of the primary LEA users of SARs provided no publicly usable case examples (33 of the 49 responding to the survey, 11 of whom provided no examples whatsoever). It is unclear if this is indicative of 1) historical lack of success with SARs; 2) limited promise of SARs; 3) limited law enforcement use of SARs; 4) no means of gathering such information; and/or 5) due to the very real possibility that the fact that one/many SARs contributed positively to a criminal justice outcome has not been disclosed in court (i.e. is not public knowledge). This last possibility is critical: industry very reasonably supports the confidentiality of SARs; such confidentiality, however, often prevents case examples from making it to the public domain.

To be fair, case examples have been in high demand with documents such as the HMIC 2004 *Payback Time* report; perhaps there are not sufficient examples to go around. A number of LEAs noted that interesting examples were available but not for public use—as cases/investigations are ongoing. Thirty-nine such examples were received from 25 LEAs in the course of the research, many resulting from consent SARs. Such examples should be enlightening in the future (and the information available about them indicates some novel/exciting uses of SARs), but alas they add little to the present thesis (and Chapter 7 in particular). There were also examples of

excellent uses made of SARs in cases which ultimately fell apart in court; they are not included here.

Publicly available case examples are presented below:

- The receipt of a SAR by an LEA acted as a catalyst in the investigation of a complex financial scheme exceeding £100 million.

- A SAR was received which suggested that a money service business in the UK was transferring substantial amounts of money overseas. An investigation commenced, revealing the existence of previous SARs, one of which suggested a connection to European drug-related crime and money laundering. The business was run by two individuals, one in the UK and one in the Middle East. The individual in the UK collected money through clandestine meetings throughout the country. The individual was arrested with more than £175,000 in cash, and a further £200,000+ was recovered in various premises. The individual admitted transferring £25 million out of the country in a period of 18 months, and was imprisoned. Nearly £600,000 were confiscated. The other individual was arrested in Europe several years later and extradited to the UK, ultimately pleading guilty to laundering £25 million.

- A SAR received from a reporting entity noted that Mr A was regularly banking large amounts of cash in the form of one pound coins, these were in round amounts and there was no form of salary paid into the account. Enquiries were commenced, and it was established that the cash was being paid into the account by the son of the account holder. Financial enquires also revealed that the father was retired and was not using the account, while the son was unemployed and in receipt of benefit. The information contained within the SAR then tied in with information held by the LEA suggesting that the son was committing offences of theft from gaming machines. A total of four men were arrested in connection with the offences and were convicted of conspiracy. Guilty pleas were submitted, and all were given terms of imprisonment. It was shown that the accused had benefited some £200,000 from their crimes, and assets were traced to the value of £82,000.

- A reporting entity made a disclosure to NCIS after Mr B instructed the entity to purchase property. The subject was at the time under investigation for drug offences. Mr B was then further investigated for money laundering, and number of accounts were discovered (of use during the confiscation).

- A SAR was filed on a drug trafficker paying cash into a third-party account under the guise of a limited company (but actually destined for a drug supplier elsewhere in the UK)—resulting in a confiscation order of some £90,000.

- Two SARs were received by an LEA indicating that a local postal official was suspected of criminality. An investigation commenced to gather evidence of criminality, which took about two years, before the arrest and charge of the official for the theft of over £750,000 from a post office. The official was sentenced to 5 years imprisonment and a confiscation order was made in the sum of over £750,000.

- The development of an intelligence package based on SARs resulted in the arrest and charge of individuals in connection with the distribution of pornographic videos.

- A number of SARs were received by an LEA relating to a number of individuals involved in exchanging large amounts of cash with travel agents. Enquiries were conducted, and all individuals were convicted of money laundering and subject to the confiscation process.

- Over a period of time, a number of SARs were disclosed by a reporting entity. These were collated by an LEA, and an intelligence package was put together for action by an operational drugs team. Family members were charged with conspiracy to supply Class A drugs. One member of the family attempted to dissipate/launder funds when released on bail. The LEA received a further SAR from a reporting entity which resulted in the family member being arrested and charged with money laundering. As a result of the SAR, the funds were secured. All family members received substantial prison sentences, and a £170,000 confiscation order was made.

- In 2003, a reporting entity requested consent regarding a transaction involving more than €1.3 million. Consent was granted, and the money was seized. Despite contending the seizure on human rights grounds, the defendant did not supply a statement nor did he appear in court. In 2004, the court ruled in favour of the LEA, forfeiting the funds.

- SARs led to the investigation of a large UK business (with turnover of billions of GBP). Through NCIS, an LEA was provided with a volume of information that detailed the ownership and nature of transactions going through offshore companies. The UK companies would buy materials from connected tax haven companies and the UK group was reporting large losses. The offshore arrangements were never static, however, and during the course of enquiries the LEA became aware of over 40 offshore companies. There were myriad issues including company residence, transfer pricing, branch/agency, trust legislation and employee remuneration arrangements. Ultimately the case settled for more than £6 million.

- A two-year investigation of a major drug trafficking operation was conducted, and nine individuals were arrested. Financial investigations were undertaken alongside the criminal investigation, and substantial assets were identified both in the UK and SE Asia, held in the name of various family members of the 'top man'. Two SARs from two different reporting entities, received over 12 months apart, located additional accounts that would otherwise not have been identified, resulting in more than £100k being added to the assets available for confiscation. A confiscation order of more than £3 million was ultimately made.

- In 2004, a consent SAR was received by NCIS from a reporting entity seeking consent to move funds in divorce proceedings (there were questions surrounding the source of funds). Consent was refused to move £200,000 on behalf of the husband. After an investigation, the husband was arrested and convicted of a £2 million fraud.

- In 2003, an LEA received a SAR from a reporting entity relating to a large deposit of cash. An operation was mounted and the LEA arrested a European national at Waterloo Station on suspicion of money laundering. The individual was just

about to board a Eurostar train to France and was carrying a large bag containing more than £150,000, which were seized. A detailed money laundering investigation was launched, involving enquiries in the United States, Europe, and an offshore jurisdiction, though no prosecution was ultimately taken forward. However, the evidence gathered during the course of the investigation showed clear links to unlawful conduct. No legitimate claim was ever made on the money, and the funds were successfully secured through a forfeiture order.

- As a result of a SAR-based intelligence package developed by an LEA, enquiries were undertaken into the affairs of two individuals working for the UK subsidiary of a multinational manufacturing firm. Mr E ordered fictitious goods and services on behalf of the company and subsequently authorised that the goods had been received and passed on sales invoices from a fictitious supplier for payment. The firm paid all such invoices into the account of this supplier, believing it to be a company account—whereas in fact it was the personal account of Mr E's ex-wife, Ms F. The majority of the funds were then forwarded on to Mr E. Both individuals were arrested for conspiracy to defraud.

- A woman was dealing heroin from her home address and duly convicted. Whilst the confiscation investigation was in progress, a reporting entity read in the local paper about the conviction. A SAR was submitted, and assets were restrained.

- Mr G, who had originally entered the UK in 1997 as an agricultural worker (and who had been denied asylum but remained in the UK illegally), set up an employment agency supplying workers to the agricultural industry with the help of a co-defendant. The agency traded from 2000-2003, employing up to 250 workers, all of whom were illegal immigrants and all of whom were supplied with forged Home Office documentation by the agency. The agency supplied up to 35 other companies with labourers. Income into the company was assessed as more than £4 million; £3 million was withdrawn in cash to pay to workers and owners. SARs from reporting entities who were alerted by the size of cash withdrawals led to the investigation of the agency. Six people were ultimately arrested, receiving custodial sentences ranging from three to seven years. A confiscation order was made against all six for £1.7 million.

- A reporting entity disclosed suspicious activity on an account. Enquiries revealed that the account was controlled by another person, Mr H. Mr H was arrested, and a search revealed him to have 100+ identities and to be systematically defrauding various banks (all with stolen identities). Mr H and an accomplice received custodial sentences. Mr H was also ordered to pay more than £250,000 following a compensation hearing.

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